# AIR UNIVERSITY CATALOG

# Academic Year 2001-2002



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## KEY AIR UNIVERSITY EDUCATIONAL STAFF, COMMANDANTS, AND COMMANDERS

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Mobilization Asst to Commander
Chief Academic Officer
Information Technology
Director of Staff
Plans and Programs
Financial Management and Personnel

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Maj Gen A. Bowen Ballard
Dr. Robert E. Kribel
Col Terry L. Williams
Col Orville Lind
Col Stephen D. Harper
Col Michael E. Outten

#### **COMMANDANTS**

Air War College
Air Command and Staff College
School of Advanced Airpower Studies
Air Force Institute of Technology

Maj Gen Bentley B. Rayburn
Col (BG select) John T. Sheridan
Col Stephen D. Chiabotti
Col Michael L. Heil

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## **DIRECTORS**

Air University Library

Dr. Shirley B. Laseter

## **DIRECT REPORTING UNITS\***

Headquarters Air Force Doctrine Center Maj Gen David F. MacGhee Jr. Air Force Historical Research Agency Col Dieter Barnes

<sup>\*</sup> Tenant units not part of the Air University system

## AIR UNIVERSITY COMMAND BOARD OF ADVISORS

**PURPOSE:** The purpose of the Air University Command Board of Advisors is to provide the commander of Air University feedback from the customer perspective of the major commands. Board members inform the Air University commander about the educational needs of their respective commands and their degree of satisfaction with Air University's products and programs.

**MEETINGS:** The board is advisory in nature and meets at least once a year at Maxwell AFB.

**MEMBERSHIP:** The membership is comprised of all the vice commanders of the major commands as well as the Air National Guard deputy director. They are advised by the Air Force deputy chief of staff, personnel, and the United States Air Force Academy vice commander.

#### **MEMBERS**

Vice Commander, Air Education and Training Command, Chair

Vice Commander, Air Combat Command

Vice Commander. Air Force Space Command

Vice Commander, Air Force Materiel Command

Vice Commander, Air Mobility Command

Vice Commander, United States Air Forces Europe

Vice Commander. Pacific Air Forces

Vice Commander, Air Force Special Operations Command

Vice Commander, Air Force Reserves

Deputy Director, Air National Guard

#### **ADVISORS**

Air Force Deputy Chief of Staff, Personnel Vice Commander, United States Air Force Academy

## AIR UNIVERSITY BOARD OF VISITORS

**PURPOSE:** The Board of Visitors is chartered to provide advice, views, and recommendations on the educational, doctrinal, and research policies and activities of Air University. The board meets with and advises the Secretary of the Air Force on matters of policy regarding the mission of Air University.

**MEMBERSHIP:** The membership is selected from the fields of education, business, industry, the professions, and public service. Members normally serve annual renewable terms up to a maximum of nine years. Members are invited by the Air University commander in the name of the chief of staff, United States Air Force.

**MEETINGS:** The board meets at least twice a year—in April and November at Maxwell AFB, Alabama. The board presents a written report with its views and recommendations to the Air University commander. This report is then presented to the chief of staff, United States Air Force, and to the Secretary of the Air Force.

#### **MEMBERS**

Dr. George Emert, Chair Former President, Utah State University Logan, Utah

Gen Jimmie V. Adams, USAF, Retired Vice President, Washington Operation L-3 Communication Corporation Arlington, Virginia

Mr. Charles B. Alling Jr. Kennebunk, Maine

CMSAF James C. Binnicker, USAF, Retired Academy Life Insurance Company Director, Counselor of Operations Alpharetta, Georgia

Dr. Michael Bragg
University of Illinois at UrbanaChampaign
Department of Aeronautical
Engineering
Urbana, Illinois

Gen Michael P. C. Carns, USAF, Retired Pebble Beach, California

Dr. Thomas E. Cooper Vice President, General Electric Company Washington, D.C. (AFIT Committee)

Dr. Ann Die President, Hendrix College Conway, Arkansas

Dr. Earl H. Dowell Dean, School of Engineering Duke University Durham, North Carolina (AFIT Committee)

Lt Gen Thomas R. Ferguson Jr., USAF, Retired Senior Partner, Dayton Aerospace, Inc. Kiawah Island, South Carolina (AFIT Committee)

Dr. Horace Fleming President, University of Southern Mississippi Hattiesburg, Mississippi

Dr. Tito Guerrero III President, University Southern Colorado Pueblo, Colorado

Dr. Bill H. Harris Former President, Alabama State University Montgomery, Alabama (SAAS Committee) Dr. Robert A. Hoover President, University of Idaho Moscow, Idaho (SAAS Committee)

Lt Gen Bradley Hosmer, USAF, Retired Cedar Crest, New Mexico

Dr. E. Jan Kehoe Superintendent/President Long Beach Community College Long Beach, California (SAAS Committee)

Dr. Richard H. Kohn Professor of History University of North Carolina at Chapel Hill Chapel Hill, North Carolina (SAAS Committee)

Gen Thomas S. Moorman Jr., USAF, Retired Vice President, Booz, Allen and Hamilton, Inc. Alexandria, Virginia

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Ms. Ann C. Petersen Attorney-at-Law Chicago, Illinois

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President and Chief Executive
Officer
Attala Company
Kosciusko, Mississippi

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Dr. Arthur Smith President, University of Houston Houston, Texas (SAAS Committee)

Mr. Marc Stanley Attorney-at-Law Dallas, Texas

Mr. Gordon P. Street President, North American Royalties Chattanooga, Tennessee

Dr. Norman E. Thagard
Professor and Director of College
Relations
Florida State University
Tallahassee, Florida
(AFIT Committee)

Maj Gen Lucius Theus, USAF, Retired President, US Associates Southfield, Michigan (CCAF Liaison) Dr. Kathryn C. Thornton
Professor in Technology
Communications, and Culture
University of Virginia
Charlottesville, Virginia
(SAAS Committee)

Lt Gen Bernard Trainor, USMC, Retired Lexington, Massachusetts

Dr. William Troutt President, Rhodes College Memphis, Tennessee

Rev. Dave T. Tyson, C.S.C. President, University of Portland Portland, Oregon

Dr. Samuel R. Williamson, Past Chair Former Vice Chancellor and President University of the South Sewanee. Tennessee

## COMMUNITY COLLEGE OF THE AIR FORCE BOARD OF VISITORS

**PURPOSE:** The purpose of the Community College of the Air Force (CCAF) Board of Visitors is to serve as the CCAF governing board. The board reviews and endorses CCAF's policy decisions and provides guidance on all aspects of college operations. An annual report on the activities of the board is submitted to the secretary of the Air Force and the secretary of defense.

**MEETINGS:** The board meets twice a year.

**MEMBERSHIP:** The board consists of civilian leaders from business, industry, and education. These members are appointed by the secretary of defense and serve jointly with the commander of Air Education and Training Command.

#### **MEMBERS**

Mr. William Cato Cramer Jr., Vice Chair President, Tommy Thomas Chevrolet, Inc. Panama City, Florida

\*Dr. James R. Anderson Chancellor, Central Texas College Killeen, Texas

Dr. Marilyn C. Beck President, Lord Fairfax Community College Middletown, Virginia

Dr. Jacquelyn M. Belcher President, Georgia Perimeter College Decatur, Georgia Dr. Deborah M. DiCroce President, Tidewater Community College Norfolk, Virginia

Lt Col John R. Fergus, USAF, Retired Dean, Instruction Affairs, Wallace Community College Dothan, Alabama

Dr. Susan Graham President, Aiken Technical College Aiken. South Carolina

<sup>\*</sup>New Members

CMSAF James M. McCoy, USAF, Retired Chairman, Air Force Retiree Council Bellevue, Nebraska

\*Dr. David Sink Jr. President, Blue Ridge Community College Flat Rock, North Carolina Maj Gen Lucius Theus, USAF, Retired President, US Associates Southfield, Michigan

\*Dr. Paul A. Whelan Associate, Aviation Associates, Inc. Springfield, Illoinois

Mr. Robert K. Wood, Vice President Logistics Management Institute McLean, Virginia

#### **EX OFFICIO MEMBERS**

Gen Hal M. Hornburg Commander, Air Education and Training Command

Lt Gen Donald A. Lamontagne Commander, Air University

Col James M. McBride Commander, Community College of the Air Force

CMSAF Frederick J. Finch Chief Master Sergeant of the Air Force

CMSgt William A. Milligan Command Chief, Air Education and Training Command

Dr. George Emert Former President, Utah State University Logan, Utah

<sup>\*</sup>New Members

## Preface

The *Air University Catalog* is the official Air University publication for disseminating information on Air University educational programs, including professional military education. Other publications including information on Air University are the *Air Force Institute of Technology Catalog*, the *Community College of the Air Force (CCAF) Catalog*, the *School of Advanced Airpower Studies Catalog*, and the *Air Force Institute for Advanced Distributed Learning Catalog*.

The *Air University Catalog* serves as both a source document and a planning document for Air University schools and staff personnel. It serves as a public relations medium for Air Force, Department of Defense, and civilian audiences. The catalog also provides a brief description of the schools and professional organizations that make up Air University. Finally, it sets forth the educational opportunities available in each school, the work performed by each related organization in carrying out the educational objectives of Air University, and a brief treatment of all Air University educational support organizations. The *Air University Catalog* and other information about Air University organizations are available over the World Wide Web on the Air University Home Page (http://www.maxwell.af.mil/).

## INTRODUCTION TO AIR UNIVERSITY

Air University plays a vital role in fulfilling the mission of the United States Air Force. To uphold the national purpose and to achieve the nation's objectives, the Air Force must maintain a corps of officers, enlisted personnel, and civilians dedicated to the nation's defense. They must have an in-depth knowledge of war and the military sciences to meet the challenges of today and tomorrow's world. Air University contributes to the development of this knowledge through its professional and specialized education programs, research and doctrinal studies, and degree programs at civilian educational institutions.

Before World War II, the only school in the armed services that emphasized the organization and employment of airpower was the Army Air Corps Tactical School, located initially at Langley Field, Virginia, and later at Maxwell Field, Alabama. Although other military schools taught aerial warfare, it was only an incidental part of their curricula. The doctrine for the use of airpower—generally accepted by the Army Air Forces during World War II—grew out of the Air Corps Tactical School. At the end of the war, the graduates of this school were instrumental in convincing the nation's defense leaders of the need to create Air University.

Air University, in all of its endeavors, serves Air Force personnel—officers, enlisted members, and civilians—to ensure the nation continues its leadership during another crucial period of history. Air University also contributes to the defense of the free world by offering educational opportunities to foreign students. Its alumni are prepared to serve in Air Force assignments, in comparable foreign air forces, and in other governmental positions.

#### Vision

Air University will be the world's premier military educational institution offering comprehensive programs and preparing its graduates to develop, employ, command, and support aerospace power's contributions to our national military strategy.

#### Mission

Air University provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education (PME), including degree granting and professional continuing education

(PCE) for officers, enlisted, and civilian personnel throughout their careers. The University's PME programs educate airmen on the capabilities of aerospace power and its role in national security. The programs also develop the knowledge and abilities needed to employ, command, and support aerospace power at the highest levels. Specialized PCE programs provide scientific, technological, managerial, and other professional expertise to meet the needs of the Air Force. Air University conducts research in aerospace power, education, leadership, and management. The University also provides citizenship programs and contributes to the development and testing of Air Force doctrine, concepts, and strategy.

## **Scope**

Air University's mission is to educate Air Force people to develop and lead the world's best aerospace force—inspiring commitment to a warwinning profession of arms.

As part of Air Education and Training Command, Air University's educational programs range from precommissioning education through professional education. Its schools encompass enlisted and officer professional education, including professional military education, professional continuing education, and degree-granting education. Through the Civil Air Patrol and Air Force Junior Reserve Officer Training Corps, Air University plays a vital role in promoting citizenship awareness among today's youth.

Air University's schools include the College for Enlisted Professional Military Education, Squadron Officer College (comprised of the Squadron Officer School and Aerospace Basic Course), Air Command and Staff College, School of Advanced Airpower Studies, Air War College, Air Force Officer Accession and Training Schools (comprised of the Officer Training School and the Air Force Reserve Officer Training Corps), the Air Force Institute of Technology, the College of Aerospace Doctrine, Research and Education, the Ira C. Eaker College for Professional Development, the Community College of the Air Force, the Air Force Institute for Advanced Distributed Learning (AFIADL), and the Academic Instructor School. The 42d Air Base Wing provides support for all Air University operations, as well as for the Maxwell Air Force Base (AFB)–Gunter Annex complex.

Air University students are primarily Air Force officers, enlisted personnel, and professional civilians. A relatively small number of personnel from other services in the Department of Defense and from other government agencies attend Air University. International officers from more than 100 countries have studied in Air University schools. Air University includes all Air Force education programs except the United

States Air Force Academy, which is a separate agency under Headquarters United States Air Force.

The precommissioning education and training organizations of Air University—the Air Force Officer Accession and Training Schools, including Officer Training School and Air Force Reserve Officer Training Corps—educate and commission highly qualified officer candidates for the United States Air Force.

The professional military education schools of Air University—Squadron Officer College (including the Aerospace Basic Course and the Squadron Officer School), Air Command and Staff College, Air War College, and the College for Enlisted Professional Military Education—prepare junior, midcareer, and senior commissioned and non-commissioned officers and civilians for progressively more responsible positions throughout the Air Force. Practically all commissioned officers who attend the professional schools of Air University possess academic degrees from civilian institutions. Their postgraduate studies in the Air University system emphasize the profession of arms.

Specialized organizations of Air University meet educational requirements of the Air Force. The School of Advanced Airpower Studies is designed to produce tomorrow's aerospace power strategists. Upon successful completion of 11 months of course work; production of a formal thesis that meets accepted standards of research, analysis, and expression; and successful completion of comprehensive examinations, graduates receive a Master of Airpower Art and Science degree. The College of Aerospace Doctrine, Research and Education assists Air University and Headquarters USAF in developing concepts, doctrine, and strategy; teaches the Joint Flag Officer Warfighting Course, the Joint Force Air Component Commander Course, the Joint Doctrine Air Campaign Course, and the Contingency Wartime Planning Course; and includes the Air Force Wargaming Institute. The Ira C. Eaker College for Professional Development provides professional continuing education for chaplains, judge advocates, comptrollers, personnel specialists, commanders, historians, first sergeants, and communication-computer systems managers. Schools operating within the college include the USAF Chaplain Service Institute, USAF First Sergeant Academy, Air Force Human Resource Management School, International Officers School, Air Force Judge Advocate General School, Commanders Professional Development School, Professional Military Comptroller School, and the USAF Historian Development School.

The Air Force Institute of Technology, located at Wright-Patterson AFB, Ohio, provides education to meet Air Force requirements in scientific, technological, logistical, managerial, and other designated professional areas as directed by Headquarters USAF. The institute consists of the Graduate School of Engineering and Management, the School of Systems and Logistics, the Civil Engineer and Services School, and the Civilian Institution Programs. Besides graduate degree programs,

the institute also offers numerous professional continuing education courses in residence at Wright-Patterson AFB and at selected locations within the continental United States. The Civilian Institution Programs are responsible for managing graduate, undergraduate, and continuing education programs at various civilian educational facilities and is responsible for Air Force health care education programs, education with industry, and numerous other programs.

## **Accreditation and Degree-Granting Authority**

The Air Force Institute of Technology (AFIT) is accredited by the North Central Association of Colleges and Schools and, in appropriate engineering curricula, by the Engineering Accreditation Commission, Accreditation Board for Engineering and Technology, Inc. The Commission of Colleges of the Southern Association of Colleges and Schools has accredited the Community College of the Air Force and the School of Advanced Airpower Studies. The Air Force Institute for Advanced Distributed Learning (AFIADL) (previously known as the Extension Course Institute or ECI) is accredited by accrediting commission of the Distance Education and Training Council.

The Center for Adult Learning and Educational Credentials of the American Council on Education (ACE) has evaluated several Air University programs and recommends some graduate credit as well as some undergraduate credit for various programs.

In October 1994, the Air University commander received congressional authority to confer the master of airpower art and science degree upon graduates of the School of Advanced Airpower Studies. In October 1999, the Air University commander received congressional authority to confer the master of strategic studies degree upon graduates of the Air War College and to confer the master of military operational art and science degree upon graduates of the Air Command and Staff College.

## **Enrollment and Admission**

Air University schools and educational programs are designed to enhance the professional knowledge of members of the US armed forces (primarily Air Force personnel) including the Reserves and National Guard and selected civilian employees of the Department of Defense and other government agencies. Air University programs and schools are not open to the general public except through special programs. As part of the United States' military assistance programs, officers from other countries are eligible to attend several Air University schools and

courses. Selection for the Air University schools and educational programs is made according to Air Force and other relevant government standards.

## PROFESSIONAL MILITARY EDUCATION PROGRAMS AND SCHOOLS

Air University's professional military education schools prepare junior, midcareer, and senior noncommissioned and commissioned officers and selected civilians for progressively more responsible positions throughout the Air Force and Department of Defense. All colleges, schools, and programs operate within the framework of the Air Force continuum of education, a coordinated and integrated educational system that links curricula across Air University so that each college, school, and program builds on the education provided at the previous level. This continuum includes five core areas: the profession of arms, military studies, international security studies, communication studies, and leadership and management studies.

## COLLEGE FOR ENLISTED PROFESSIONAL MILITARY EDUCATION

Col William B. Shields, Commander CMSgt Ralph Jennings, Vice Commandant

#### Internet Address

http://www.maxwell.af.mil/au/cepme/college.htm

**Mission:** Provide the continuum of education necessary for the Air Force to develop the best enlisted leaders in the world.

The College for Enlisted Professional Military Education (CEPME) was activated 15 December 1993. The college is responsible for the instructional programs and faculty development for the airman leadership schools (ALS), noncommissioned officer academies (NCOA), and the Air Force Senior Noncommissioned Officer Academy (AFSNCOA). These schools graduate approximately 27,500 students annually. The college conducts studies of enlisted professional military education (EPME) issues and advises Air Force leadership on EPME matters.

**Goal:** Expand the leadership ability of enlisted leaders and strengthen their commitment to the profession of arms by integrating sound leadership, communication skills, and military studies principles and concepts throughout the ALS, NCOA, and AFSNCOA curricula.

CEPME implements its missions and goals through its resident programs and distance learning programs. The major components of CEPME are the Educational Programs Cadre (EPC), the AFSNCOA, nine NCOAs located in the continental United States (CONUS), and the Air Force Enlisted Heritage Research Institute (AFEHRI).

## **Educational Programs Cadre**

Dr. Doug Savell, Dean

#### Internet Address

http://www.maxwell.af.mil/au/cepme/epc/cadre.htm

The college EPC, created in 1993 by reorganizing the USAF Enlisted PME Support Center at Maxwell AFB, Alabama, and the USAF Senior NCO Academy Curriculum and Evaluation Directorates, provides educational programs supported by the Continuum of Education to

prepare enlisted personnel for increased responsibilities. EPC is comprised of the dean; the Educational Directorate, consisting of three instructional design teams, for example, Profession of Arms, Leadership, and Communication Skills; and the Operations Directorate consisting of Data Analysis, Operations and Training, Interactive Courseware Development, and Plans and Programs. Additionally, an Air National Guard (ANG) liaison, a training NCO, and an administrative staff are assigned to EPC. EPC develops, validates, and evaluates the curriculum for resident and distance learning programs and formulates policies and procedures governing operations at all EPME schools located worldwide. EPC is responsible for developing, standardizing, and assuring the effectiveness of all EPME programs for the USAF. EPC is the office of chief responsibility for the 8T000 Career Field Education and Training Plan (CFETP) as well as the Community College of the Air Force (CCAF) point of contact for all CEPME schools. The EPC staff provides technology assistance and password protected Web access for all EPME schools to ensure rapid updates of policies, procedures, and curriculum. The EPC develops and manages distance learning courses for each level of EPME and designs and teaches the EPME Instructor Course to orient new instructors assigned to ALS, NCOA, and AFSNCOA programs.

## **Air Force Senior Noncommissioned Officer Academy**

CMSgt Roger Ball, Commandant

#### Internet Address

http://www.maxwell.af.mil/au/cepme/sncoa/sncoa.htm

The Air Force established the AFSNCOA in 1972 to fill a void in professional military education (PME) for AF senior NCOs. In January 1973, the academy began its first class with 120 senior NCOs and a curriculum divided into two major areas: military environment and military management. Presently, the academy has an annual enrollment of over 1,800 senior NCOs, chief petty officers, and international senior NCOs. Offering instruction in three major areas, the AFSNCOA is the capstone of enlisted PME.

The instruction provided by the AFSNCOA makes a positive impact on the careers of its graduates. Eight academy graduates have served as the chief master sergeant of the Air Force—Thomas N. Barnes, James M. McCoy, Arthur L. Andrews, Sam E. Parish, James C. Binnicker, David J. Campanale, Eric Benken, and Frederick J. Finch. Most command chief master sergeants are also academy alumni.

CEPME

**Mission:** Expand the leadership capabilities of senior enlisted leaders and reinforce a commitment to the profession of arms through a dedicated and professional team.

**Goal:** Conduct a relevant and rigorous educational program contributing to the professional development and motivation of senior NCOs.

**Eligibility:** AF and selected Air Force Reserve (AFRes) and ANG senior NCOs attend the academy in residence. Selected Army, Navy, Coast Guard, and international military personnel also attend on a limited basis. Active duty AF personnel must have at least one-year retainability following graduation, and this course must be completed before they can be promoted to chief master sergeant.

#### **Resident Curriculum**

The academy's philosophy is that senior enlisted leaders have the need and desire for advanced PME to assist them in fulfilling their expanding leadership and management roles. The senior EPME program is based on sound educational principles with high academic standards. It strives to satisfy student needs with individualized instruction where possible.

**Curriculum Summary** 

Instructional Area	Academic Hours
Profession of Arms	72
Communication Skills	38
Leadership and Management	102
Collateral Curriculum	19
Commandant's Time	9
TOTAL	240

**Duration and Quota:** The AFSNCOA conducts five, 30 academic-day resident classes each year with a student quota of 360 per class.

**Selection:** The Air Force Military Personnel Center identifies and notifies active duty students for attendance. AF students must meet all AF standards. Students from other services must meet their service's standards. Complete eligibility and selection criteria can be found in Air Force Instruction (AFI) 36-2301, *Professional Military Education* and online at the Air Force Education and Training Course Announcements (ETCA) (https://etca.keesler.af.mil).

**Academic Credit:** The AFSNCOA is affiliated through CEPME to CCAF, which is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Graduates of the resident course are currently awarded nine semester hours of undergraduate credit from the CCAF.

#### **Noncommissioned Officer Academies**

In October 1993, a Headquarters USAF program action directive ordered the transfer of the 10 CONUS NCO academies from AF major air commands (MAJCOM) to Air Education and Training Command (AETC). In November 1993, AETC assigned these academies to the newly formed CEPME. Currently, nine NCO academies aligned under CEPME operate in CONUS at Goodfellow, Gunter, Keesler, Kirtland, Lackland, McGuire, Peterson, Robins, and Tyndall Air Force bases. An NCO academy, located at McGhee Tyson Airport, Knoxville, Tennessee, is under the functional control of the ANG. Air Force MAJCOMs overseas operate their own academies. Pacific Air Forces (PACAF) has three academies located at Elmendorf AFB, Alaska; Kadena AB, Okinawa, Japan; and Hickam AFB, Hawaii. US Air Forces, Europe, has one academy at Kapaun AS, Germany.

**Mission:** Provide PME to prepare NCOs for positions of greater responsibility by broadening their leadership and supervisory skills and expanding their perspective of the military profession.

**Goal:** Furnish an environment for students to gain an understanding of their positions in the military structure and develop the skills necessary for effectiveness in those supervisory positions.

**Eligibility:** Students are technical sergeants and technical sergeant selects with one-year of retainability upon completion of the NCOA. Students must complete the NCOA before they assume the grade of master sergeant.

#### **Resident Curriculum**

The NCO Academy 220-hour curriculum consists of three academic areas—profession of arms, communication skills, and leadership. The principal method of instruction used at this level of EPME is the guided discussion.

#### **Curriculum Summary**

Instructional Area	Academic Hours
	nours
Profession of Arms	46
Communication Skills	53
Leadership and Management	100
Collateral Curriculum	12
Commandant's Time	9
TOTAL	220

**Duration and Quota.** The NCOA is conducted at 14 locations worldwide and most NCOAs operated seven classes per year. This is a 28-academic-day course, and quotas are distributed by each MAJCOM annually.

**Selection.** Students are selected based on the eligibility criteria outlined in the ETCA and AFI 36-2301, *Professional Military Education*. Local Military Personnel Flights (MPF) manage this process for each base.

**Academic Credit.** The nine CONUS NCO academies are affiliated through CEPME to the CCAF, which is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Overseas NCOAs and the ANG NCOA located at McGhee Tyson Airport are affiliated directly with CCAF. All graduates of the resident course currently receive 11 semester hours of undergraduate credit with CCAF.

## **Airman Leadership School**

In April 1991, the AF directed that Headquarters AU establish the Airman Leadership School (ALS) program. On 1 October 1991, a new and standardized program came on-line to teach senior airmen PME. The stand up of the new ALS discontinued the Noncommissioned Officer Preparatory Course (NCOPC) and the Noncommissioned Officer Leadership School (NCOLS) programs. ALS became the first of three PME programs that enlisted professionals attend during their AF careers. Functional responsibility for each ALS rests with the local Mission Support Squadron.

**Mission:** Prepare AF personnel in the rank of senior airmen for supervisory duties and foster a commitment to the profession of arms.

**Goal:** Provide senior airmen an opportunity to more fully understand their position in the USAF organizational structure and the continued need for professional development to be effective NCOs.

**Eligibility:** Students are senior airmen or staff sergeant selects with 48 months time in service and one-year retainability in the Air Force upon graduation. ALS completion is required before attaining the rank of staff sergeant.

#### **Resident Curriculum**

ALS consists of 191 curriculum hours conducted over 24 academic days at 76 locations worldwide. The primary instructional methodology is the guided discussion. Instruction covers three broad academic areas including profession of arms, communication skills, and leadership. Flight Chief's Time and Collateral Curriculum round out the course.

**Curriculum Summary** 

Instructional Area	Academic Hours
Profession of Arms	47
Communication Skills	45
Leadership and Management	83
Collateral Curriculum	10
Flight Chief's Time	6
TOTAL	191

**Duration and Quota.** The ALS is conducted at 68 active duty AF bases worldwide and eight ANG bases located in the CONUS. This is a 24-academic-day course, and most ALS's operate eight classes per year. Quotas are locally assigned based on the eligible population.

**Selection.** Students are selected based on the eligibility criteria outlined in the ETCA and AFI 36-2301, *Professional Military Education*. Once selected, attendance is mandatory. Local MPF's work directly with each ALS to ensure eligible students are selected.

#### **Academic Credit**

All ALSs are individually affiliated with the CCAF, which is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Graduates of the resident course currently receive

eight semester hours of undergraduate college credit with CCAF. CCAF is automatically notified of class graduations for update of CCAF records and transcripts.

## **Enlisted Professional Military Education Instructor Course**

The Enlisted Professional Military Education Instructor Course (EPMEIC) indoctrinates new instructors, flight chiefs, directors of education, or commandants being assigned to an ALS, NCOA, or the AFSNCOA.

**Mission:** To indoctrinate entry-level instructors into the field of EPME.

**Goal:** To help instructors understand how the EPME curriculum builds a stronger enlisted force and to help them apply specific managerial skills to the academic environment.

**Eligibility:** Students must be graduates of Academic Instructor School (AIS), and attendance is required for all newly assigned EPME instructors. Headquarters AF Personnel Center (AFPC) selects students based on AIS attendance.

#### **Resident Curriculum**

The five-day course provides students an understanding regarding the relationship between EMPE at specific career points and a stronger enlisted force. During the course, students receive an orientation of the resident EPME curricula, classroom management techniques, and EPME policies and procedures.

### **Curriculum Summary**

CEPME
Organizational Structure
Professionalism for the PME
Instructor
Test Item Analysis
Career Field Education and
Training Plan (CFETP)
Writing Evaluation Workshop
Speaking Evaluation Workshop
Case Studies Workshop
Validation/Lesson Change
Process

Procedural Guidance
Evaluating Communication Skills
Instructor Responsibilities
Contemporary Educational Issues
Program Specific Curriculum
Issue
Course Design
ALS/NCOA/SNCOA Profession of
Arms Structure
ALS/NCOA/SNCOA
Communication Skills
Structure
ALS/NCOA/SNCOA Leadership
Structure

**Duration and Quota.** The five-day EPMEIC is offered six to seven times per year, serving approximately 130 students per fiscal year. The course is conducted immediately following graduation from AIS. The EPC staff instructs this course in-house at Headquarters CEPME, Maxwell AFB-Gunter Annex.

#### **Academic Credit**

No academic credit is awarded for the EPMEIC.

## **CEPME Distance Learning**

The College for Enlisted Professional Military Education provides distance or distributed learning opportunities to the AF enlisted corps.

### **AFSNCOA Distance-Learning Courses**

**AFIADL Course 00005.** The AFSNCOA distance learning (DL) course on CD-ROM consists of six modules: Profession of Arms, Leadership Planning, Behavior Analysis, Human Resource Development, Organizational Management, and Communication Skills. There are five objective, multiple-choice tests. The Profession of Arms module is evaluated using a survey and is designed to reinforce USAF airman identity.

#### **NCO Academy Distance Learning Course**

**AFIADL Course 00006.** The curriculum of the NCO Academy DL course consists of four volumes addressing communication skills, military studies, leadership and management principles, and quality of life.

### **Airman Leadership School Distance Learning Course**

**AFIADL Course 00001.** The curriculum of the ALS DL course covers the profession of arms, leadership and communication skills/principles for first-line supervisors.

### Eligibility

Eligibility criteria, course responsibilities, and academic credit are outlined in the on-line *Air Force Institute for Advanced Distributed Learning Catalog* (http://www.maxwell.af.mil/au/afiadl/curriculum/catalog/html/contents04-01.htm).

## **SQUADRON OFFICER COLLEGE**

Col Johnny A. Weida, Commander

## Internet Address

http://www.maxwell.af.mil/au/soc/

**Mission:** To develop twenty-first century airmen who can advocate the unique value of aerospace capabilities, who value team achievement over individual success, and who are committed to the profession of arms.

The Squadron Officer College (SOC) is designed to educate company grade officers on the basic concepts of modern-day aerospace warfare and essentials of military leadership. Commissioned as an AU college in February 2000, SOC is composed of two educational schools: the Aerospace Basic Course (ABC) and Squadron Officer School (SOS).

ABC is a four-week program organized to teach second lieutenants the essential concepts of how the Air Force prosecutes aerial wars. The course begins with a survey of key AF weapon systems and includes descriptions of how these weapons are employed in combat. Other lessons include an introduction to war theory, historical airpower principles, strategic concepts, and the basics of aerospace doctrine. In addition, students are taught various leadership concepts and are required to act as military teams in solving complex problems. After learning these fundamental concepts, students work as a combat team in a simulated Aerospace Operational Center (AOC) and report to a joint forces air component commander (JFACC). They develop and execute an aerial campaign plan in a complex three-day war game. Through these efforts, ABC provides the fundamental concepts and motivation for lieutenants to begin learning and inculcating the skills, values, and ethos of a professional airman.

SOS was originally commissioned in the 1950s during the Korean War. Initially, it was organized as a war leadership school, teaching USAF captains the salient concepts of aerial warfare and the command responsibilities involved in combat situations. Col Russell V. Ritchey, USAF, the school's founder, stated that SOS's primary purpose was to study war. "I wanted no off-shoots," explained Colonel Ritchey, "which would distract the student from his primary aim or compromise the purity of the profession."

Following these guidelines, today's SOS is designed to teach the essence of military leadership, aerospace doctrine, international security issues, and communication skills. Students are not only exposed to these new concepts, they are required to apply these lessons in a variety of complex experiential learning exercises which involve the human

emotions of fatigue, frustration, and esprit. Physical fitness, team problem solving, and proper military decorum are critical aspects of the school's offerings. Over the years, Medal of Honor recipients, astronauts, and principal military commanders—both in the United States and from various international countries—have graduated from this institution. SOS is a premier military leadership school.

command support divisions include Curriculum Directorate. Programs, and Evaluations Directorate. Plans, Directorate of Mission Support. The Director of Curriculum develops and maintains educational lessons, readings, and a distinguished speaker program for both ABC and SOS. The Plans, Programs, and Evaluations Directorate manages the day-to-day classroom schedules, evaluation procedures, and course surveys, and conducts a long-range planning cycle. The Directorate of Mission Support ensures maintenance of all facilities, including extensive athletic playing fields, physical fitness courses, equipment, and military leadership obstacle courses.

## **Aerospace Basic Course**

Lt Col Dale Shoupe, Commandant Lt Col John McCain, Vice Commandant

#### Internet Address

http://www.maxwell.af.mil/au/soc/abc

**Mission:** Inspire new USAF officers to comprehend their roles as airmen who understand and live by USAF core values, articulate and demonstrate USAF core competencies, and who dedicate themselves as warriors in the world's most respected aerospace force.

**Goal:** Through a shared dynamic experience, ABC commissioned officers and civilians will comprehend how the unique capabilities of aerospace power support our national security policy and value the importance of personal ownership and commitment to their Air Force and profession of arms.

ABC is an educational program for newly commissioned second lieutenants and for selected civilians. It was originally created as a test program in 1997 and was called the "Air and Space Basic Course" (ASBC). In January 1999, ABC was commissioned as a formal AU educational program. On 8 February 2001, it became one of the key schools within SOC.

ABC's curriculum explores the foundations of aerospace doctrine, the core competencies, and examines how aerospace power is employed in combat. In all these lessons, the importance of the AF's core values are continually reemphasized. Students attending ABC are encouraged to comprehend and value their roles as airmen in the world's most respected aerospace force. They are required to articulate how the USAF core competencies were forged in the fires of aerial combat in the skies over Europe, Japan, Korea, Vietnam, Iraq, and Serbia. They are required to demonstrate how the AF plans to fight and operate in wars as a key part of a joint or coalition force.

In this post-cold-war era, where the military threats are complex and illusive, ABC was created to provide young officers with the logic and the grammar of their unique AF profession. "To prepare for an uncertain future," stated Carl Builder, "the Air Force needed to readdress its fundamental 'sense of identity and purpose." Because of its emphasis on heritage and on the study of aerospace operational planning, ABC is very different from the traditional curriculum used in most precommissioning programs.

The course is a four-week program built around indoor and outdoor classroom activities. The pinnacle of the curriculum is "Blue Thunder," a three-day war game executed in bare-base conditions where students are thrust into key roles in an AOC. Students exercise a theater aerospace campaign, including development of a master air attack plan. This capstone war game demonstrates to the student that teamwork is required to successfully plan a joint aerospace campaign. War games and application-level exercises are used throughout the course to maximize student learning level and comprehension.

#### Curriculum

The ABC curriculum consists of two interconnected areas of study. Area one is linear, in which each lesson is built upon the preceding one and addressing the achievement of the designated educational goal. The second area is nonlinear, striving to create the affective changes to motivate students to consider themselves AF officers—above all else.

To maximize the learning level of entry-level students into this intense four-week curriculum, ABC employs state-of-the-art educational technologies in the classroom and in various exercises. To help students learn and instructors teach, the learning material includes the following:

- ? DOD Digital Versatile Disk (DVD) classroom application "What Now, Lieutenant?" for presenting core values and ethics case studies for random access and full-screen, full-motion professional video segments.
- ? Multiplayer networked war games, AFEX and AIRGAP, are played to reinforce application-level learning, with an emphasis

on the AF core competencies, joint service teamwork, integration of theory and doctrine concepts, crisis-action planning under stress, and decentralized execution. Flights are broken up into two teams, with each team playing against its sister flight.

? An exported version of Air Force Wargaming Institute's (AFWI) Air Force Command Exercise System (ACES) theater campaign simulation, which allows student flights to conduct an aerospace campaign against an opposition force comprised of other students. This exercise, called Blue Thunder, is a capstone war game fought from an austere forward deployment site, which includes a simulated AOC.

#### **Duration and Quota**

ABC will conduct eight classes during academic year 2001–02 for a total of 4.844 students. Each class lasts four weeks.

**Curriculum Summary** 

Curriculum Summary				
	Academic			
Curriculum Area	Hours			
Profession of Arms	85.50			
Leadership/Management	20.33			
Military Studies	11.00			
Communication Studies	0.00			
International Studies	1.50			
TOTAL INSTRUCTION	118.33			
Other (Admin and Testing)	20.00			
Course Total	138.33			

# **Squadron Officer School**

Col Frederick Rauch, Commandant Lt Col Dale Watson, Vice Commandant

# Internet Address http://www.maxwell.af.mil/au/sos/

**Mission:** Develop dynamic leaders rededicated to the profession of arms.

**Goals:** Educated students will value their unique role as AF officers by

- ? applying aerospace leadership to effectively execute military missions, and
- ? valuing the warrior-leader ethos and its impact on aerospace power development.

SOS is an AU educational institution designed to teach USAF company grade officers the skills of command leadership. The institution originated in 1946 at Tyndall Field, Florida, and was called the Air Tactical School. In 1950 after the Air Tactical School closed and the faculty transferred to Maxwell Field, Alabama, where under the leadership of Col Russell V. Ritchey, they developed a new educational program called "Squadron Officer Course." The first company grade officers began attending this institution on 23 October 1950. From 1950 to 1959, Squadron Officer Course was an organizational unit within ACSC. Above all, noted Colonel Ritchey, the course was developed primarily to educate officers within the expertise of the profession of arms. In 1959 this course was renamed Squadron Officer School and began reporting directly to the AU commander.

SOS teaches all the key command and leadership concepts of being able to analyze situations, develop plans, train followers, perform as a team, and critique the effort. While attending SOS, students step away from their special technical skills and broaden their focus on the Air Force as an institutional fighting force. They prepare for command responsibilities, study the significance of the core values, and learn about aerospace doctrine. After studying various military leadership concepts, they are required to apply these skills in various experiential learning exercises.

SOS not only provides students with an opportunity to understand how leadership skills influence team achievement but also provides these officers the opportunity to experience the responsibilities of being an effective follower. This focus on followership includes such functions as taking risks, working with others, and constructively dissenting when the team or leader is headed in the wrong direction. In addition, the SOS experience helps students refine their written and oral communication skills as well as establishes a foundation of knowledge on how the Air Force fights wars.

#### **Resident Curriculum**

SOS presents aerospace history, doctrine, and employment concepts to the students throughout the course. The students improve their knowledge of the Air Force and its mission through multiple readings, seminar discussions, and lectures presented by aerospace power experts. In the Operation Atlantis war game, students organize and operate an aerospace operations center. They get an opportunity to build and execute an air campaign plan while further applying the principles of leadership, communication skills, and team building.

To emphasize team building, leadership, and followership, the SOS curriculum lessons are sequenced concurrently, rather than sequentially. Students, therefore, are required to study a lesson, work as a team, and then apply the ideas in a complex exercise afterward. This approach to learning helps officers improve professionally and promotes the inculcation of the warrior-leader ethos.

#### **Duration and Quota**

SOS will conduct seven classes during academic year 2001–02 for a total of 2.808 students. Each class lasts five weeks.

# **Prerequisites and Selection**

Captains with at least four and less than seven years of total active federal commissioned service, who are not in a failed or deferred promotion status, are eligible to attend SOS. DOD civilians in the grade of GS-9 and above with at least four years of continuous civil service are eligible. See Air Force Catalog 36-2223, *USAF Formal Schools*, for additional information.

# **Curriculum Summary**

	Academic
Curriculum Area	Hours
Profession of Arms	35.25
Leadership/Management	86.75
Military Studies	11.00
Communication Studies	17.00
International Studies	4.50
TOTAL INSTRUCTION	154.50
Other	25.00
<b>Course Total</b>	179.50

# **Nonresident Program**

The SOS Nonresident Program 26 (book version) and Program 27 (CD-ROM version) consist of five courses: 26A/27A, Profession of Arms; 26B/27B, Military Studies; 26C/27C, International Studies; 26D/27D, Communication Studies; and 26E/27E, Leadership and Management Studies. Under normal circumstances, students must complete the entire program within 18 months.

The SOS Nonresident Program typically presents similar material to the resident curriculum and is administered by the AFIADL at Maxwell AFB–Gunter Annex. Captains (O-3) or above and selected DOD civilians in the grade of GS-9 or above are eligible to enroll in the program. See the *Air Force Institute for Advanced Distributed Catalog* (available on the World Wide Web—(http://www.maxwell.af.mil/ au/afiadl/curriculum/catalog/cattoc\_fr.htm) for detailed course description and eligibility criteria.

**Curriculum Summary** 

Curriculum Area	Academic Hours
Profession of Arms	12
Military Studies	21
International Studies	18
Communication Studies	18
Leadership/Management	27
TOTAL	96

#### **Academic Credit**

**Resident Program.** The new five-week resident program is under review by the American Council on Education for recommended academic credit.

**Nonresident Program.** The new SOS Distributed Learning Course is also under review by the American Council on Education for academic credit.

# AIR COMMAND AND STAFF COLLEGE

Col (BG select) John T. Sheridan, Commandant Col Stephen C. German, Vice Commandant

# Internet Address

http://www.acsc.maxwell.af.mil/

**Mission:** A world-class team educating midcareer officers to lead in developing, advancing, and applying aerospace power across the spectrum of service, joint, and combined military operations.

Air Command and Staff College, the Air Force's intermediate PME school, prepares field grade officers of all services (primarily majors and major selects), international officers, and US civilians to assume positions of higher responsibility within the military and other government arenas. Geared toward teaching the skills necessary for aerospace operations in support of a joint campaign as well as leadership and command, ACSC focuses on shaping and molding tomorrow's leaders. The college's academic environment stimulates and encourages free expression of ideas as well as independent, analytical, and creative thinking. Additionally, ACSC is a national leader in the development of new teaching and learning techniques using such technologies as hyperinformation systems.

ACSC traces its roots to the Air Corps Tactical School (ACTS) located at Maxwell Field from 1932 to 1942. After World War II, as the independent Air Force was formed, grew, and developed, the requirements and expectations of the school evolved to fulfill the service's educational needs. The vision of pre-World War II leaders has withstood the test of time. Although six decades have passed since the founding of ACTS, the present 10-month curriculum still focuses on expanding understanding of airpower and on the growth of midcareer officers. In 1962 the school became known by its current name, Air Command and Staff College.

During academic year (AY) 1994, ACSC undertook the most significant change to its educational program since the school's inception. The school transitioned from a lecture-based, passive-learning environment to a seminar-centered, active environment with an integrated curriculum geared to problem solving in the continuum from peace to war. In AY 1999, ACSC began efforts to align its curriculum according to the AU commander's Strategic Guidance for the Continuum of Education. The ACSC program now functions as a portion of a comprehensive and integrated career-long PME program.

**Goals:** ACSC has six goal statements that focus on and support the vision of "a world-class team building the world's most respected aerospace power educational institution. . . . producing leaders for the future."

- ? Sustain a quality faculty to serve the needs of the institution and advance the process of academic degree and joint professional military education (JPME) accreditation.
- ? Educate future leaders toward a full and common understanding of aerospace power, history, doctrine, joint and combined operations, leadership, and USAF core values.
- ? Ensure that resident students meet the objectives of intermediate level of PME while being afforded the opportunity to complete the requirements of the master of military operational art and science degree.
- ? Ensure that nonresident students meet the objectives of intermediate level of PME by completing all nonresident course requirements.
- ? Exploit robust educational technologies to support and enhance the activities and mission of ACSC to include expanding instructional resources, increasing student interaction and retention, focusing student time, and reducing class-related annual expenses.
- ? Provide a premier graduate school physical environment.

ACSC's three deans—education and curriculum, students and support, and distance learning—provide academic leadership to the school's faculty and student body. The dean of education and curriculum, assisted by the vice dean for academic affairs and vice dean for operations, coordinates the integration of the final curriculum content and directs the planning and implementation of the academic programs of four curriculum departments: International Security and Military Studies, Joint Warfare Studies, Leadership and Communication Studies, and Joint Education. The dean of distance learning is responsible for planning, organizing, and delivering the nonresident program of instruction through the departments of curriculum and operations. The dean of students and support coordinates student activities and is responsible for student services. The dean and the commander and staff of the 21st Student Squadron are responsible for the health, morale, and welfare of 600 resident students and their families.

# **Resident Program**

The primary form of instruction in the resident curriculum is seminars held in specially designed rooms featuring closed-circuit television, an array of multimedia equipment, and student access to a school-wide computer network and the Internet. Simulated war scenarios provide integrated capstone course exercises throughout the year and are conducted in the seminar rooms and AU's AFWI. Students are issued more than 80 books to expand their professional capabilities and a personal laptop computer to use to keep track of the academic schedules, on-line reading assignments, and for use in examinations throughout the academic year.

#### **Duration and Quota**

The resident program consists of 10 months of instruction. Approximately 500 officers from the USAF, Army, Navy, and Marine Corps; 80 international officers; and 20 civilian employees of selected agencies of the federal government attend this course.

# **Prerequisites and Selection**

Air Force candidates to attend ACSC are selected in conjunction with O-4 promotion boards. A central PME selection board, with major command input, selects the actual ACSC class from these candidates based on their demonstrated potential for assignment to key field grade command and staff positions. Majors, major selects (or equivalent rank), GS-12, and GS-13 government civilians are eligible to attend ACSC. Reference AFI 36-2301, *Professional Military Education* and the ETCA Web site at (http://etca.keesler.af.mil/), for additional information.

# Degree-Granting Authority, Accreditation, and Eligibility

In 1999 Congress granted the AU commander the authority to confer a master's degree—the degree of master of military operational art and science—upon the graduates of ACSC who fulfill the requirements for that degree. AU is seeking accreditation of this degree.

To be admitted to the master's degree program, an individual must be selected to attend the ACSC resident program and hold a qualifying undergraduate degree. US applicants other than USAF officers must submit copies of their official undergraduate transcripts from all institutions of higher learning to the AU Registrar. The AU Registrar verifies bachelor's degrees for all AF officers, including ANG and AFRes officers. Students not having a baccalaureate degree are allowed to attend ACSC but do not receive the master's degree.

International officers interested in pursuing the master's degree must submit the following information to the AU Registrar to assess eligibility:

- 1. Official score sheet of the Test of English as a Foreign Language (TOEFL). The TOEFL is not required for international officers from countries where the official language is English. The minimum acceptable score for *unconditional* admission to the master's degree program is 540 for the paper-based test (207 for computer-based test). The minimum acceptable score for *conditional* admission is 500 for the paper-based test (173 for computer-based test). When taking the TOEFL, enter **9069** for AU as the institution code. Students admitted conditionally must retake the TOEFL after beginning ACSC classes. A faculty committee must evaluate the academic progress of any students who do not achieve a score of 540 on the retest to determine whether or not they will be allowed to continue in the degree program.
- 2. Official transcripts (academic records) of previous degrees with certified English translations. Diplomas alone are not sufficient but should be included with academic records.
- 3. A document-by-document evaluation of the academic records by an independent foreign credentials evaluation service that is a member of the National Association of Credential Evaluation Services (NACES) or the National Association of Foreign Student Affairs: Association of International Educators (NAFSA:AIE) to determine if the records are equivalent to a US four-year bachelor's degree. Applications for this evaluation will be available from the AU Registrar during in-processing at the International Officer School. When requesting the document-by-document evaluation, the purpose for the evaluation should be stated as: for "further education" or "admissions requirement for master's degree program." A copy of the evaluation must be mailed to the AU Registrar.

It is the responsibility of each individual to pay for costs associated with the TOEFL and credential evaluation requirement. Both the bachelor's-level equivalency and minimum score on the TOEFL must be met to be eligible for entry into the master's program. The undergraduate degree and English proficiency requirements are necessary for the degree program and are additional requirements to the prerequisites for

admission to the college. Students not having a baccalaureate degree or making the minimum TOEFL score will be allowed to attend ACSC but will not be awarded the master's degree.

**Minimum Grade Point Average.** Students must complete the 32-semester-hour ACSC resident program with an overall grade point average of 3.00 on a 4.00 scale to earn award of the master's degree.

#### **Resident Curriculum**

#### OC 5500, Orientation Program

noncredit

The orientation program provides students with an overview of ACSC's Program for Joint Education, USAF educational learning theory, policies, curriculum, research, and principles they will encounter throughout the academic year. The program includes an introduction to small group dynamics, communication skills, available technology, research requirements, class member responsibilities, and available services to enhance learning.

# LC 5500, Leadership and Communication Studies 8 semester hours

Leadership and Communication Studies is designed to enhance the students' understanding of their own notion of leadership and then helps them apply that understanding in the development of their approach to leadership and command. Course curriculum consists of three phases. Phase I — "Leadership and Communication Foundations," establishes a solid theoretical base. Phase II — "Leadership Perspectives," provides structured opportunities twice each month to reflect on contemporary leadership issues using guest speakers and seminars. Phase III — "Leadership in the Military Environment," highlights responsibilities, expectations, and resources available to military leaders. The goal is for students to be better prepared to face the challenges of leadership during their upcoming command and staff tours. Furthermore, the course is designed to enhance students' understanding of the complex interrelationships between clarity of thought and clarity of expression, and reinforce the importance of these factors to the successful planning and execution of military operations. The Leadership and Communication Studies course is designed to support AU Continuum of Education objectives.

# IR 5500, National and International Security Studies

#### 3 semester hours

The National and International Security Studies course provides a foundation for understanding the complex and dynamic national and international security environment in which military operations take place. Phase I introduces students to the international system, identifying major structure, patterns, actors, and regions. Three

world-view perspectives are presented to give students tools to help analyze this strategic environment. Phase II explores US national security, focusing on key actors and their roles in the process of formulating US national security strategy and related military strategy. Students also consider how to effectively coordinate all the instruments of power to support our national security interests. The course culminates in Phase III, giving students the opportunity to assess current national and international security challenges and opportunities through a combination of lectures, panels, and case study analysis.

#### NW 5500, Nature of War

#### 3 semester hours

War is a complex phenomenon. In order to better understand this phenomenon, students analyze certain key aspects of the "nature of war." To this end, six of war's most prominent features are examined. The first major category explores the reasons why people and states fight. The course next turns to the ethics of war by exploring both the morality of war and morality in war. With this foundation established, the next topic addresses several types and theories of war, including total, limited, revolutionary, and wars of religion. Once various types of wars have been explored, the course then focuses on Western, American, and Chinese perspectives on war to analyze how states fight and the ways in which nations and armies adapt to change both in the means and methods of war. The fifth major category centers on the problems and challenges concerning the cessation of hostilities, namely war termination and conflict resolution. Finally, as a capstone, students will explore the question—Does war have a future?

# AP 5500, Airpower Studies

# 3 semester hours

The Airpower Studies course expands students' broad understanding of war theory by introducing modern perspectives on war fighting. Students survey twentieth century military history to identify significant contributions to the body of war theory, reflect on ACSC's emphasis on aerospace power, and specifically examine the development of airpower technology, theory, and doctrine, in order to determine what airpower adds to man's quest for effectiveness in war. Students will describe airpower's contributions in terms of evolving aerospace power doctrine and theory, the principles of war, and the campaign planning process. Throughout the course, students will be challenged to think critically about the operational level of war, reviewing historical operations to extract and explain enduring principles of war and aerospace power. Course composition includes formal and informal lectures, discussions, and student-led historical case studies in seminar. Lectures, formal and informal, introduce broad concepts and provide historical continuity for

seminar discussions. Case studies offer an opportunity to evaluate theory and doctrine in a historical context.

# NP 5500, National Planning Systems 1.5 semester hours

The National Planning Systems course provides students a critical understanding of national-level decision making and planning processes they will need as future planners and leaders of joint and multinational forces. Moving from the foundation of national security policy making firmly established by previous courses, this course examines the basis for joint war fighting through a study of the roles of the nation's senior civilian and military leadership, current joint doctrine, and historical examples and perspectives. These factors are emphasized in describing how the Defense Planning Systems provide direction for—and assets to support—joint war fighting. These subjects provide a foundation for the Joint Forces and Campaign Planning courses that follow. Upon course completion, students will have an appreciation for how the critical decisions and direction provided by our national leadership drive the missions, structure, and resources of our military forces. They will be prepared to formulate innovative solutions to operational problems and further examine the planning and employment of aerospace power as part of joint and multinational operations.

#### JF 5500, Joint Forces

#### 3 semester hours

To plan and conduct military campaigns as a joint staff member, it is necessary to have a thorough understanding of each of our military services' capabilities, functions, and doctrine; how these forces are provided to the joint force commander (JFC); and how these forces may best be employed to achieve synergy and unity of effort. This course develops a foundational understanding of US military capabilities and functions that a JFC will tailor and utilize to accomplish his mission. It provides the baseline for conducting campaign planning in the course that follows and expands upon the National Planning Systems and National and International Security Studies courses by enhancing student understanding of why the United States is postured and equipped to operate and fight the way it is. Thus while this course provides an overview of joint forces and JFC enablers it by no means is intended to provide a tactical-level knowledge of joint capabilities and functions; rather it is operationally bounded by what the JFC needs to know to run the battle space.

# JP 5500, Joint Campaign Planning 2

#### 2.5 semester hours

To employ theater forces in military campaigns, it is necessary to have a thorough understanding of the area of campaign planning. The Joint Forces course provided a foundation of the US military's capabilities, functions and limitations and how these forces may best be used to achieve synergy and unity of effort. The Joint Campaign Planning course expands and applies this knowledge through a comprehension and application level study of deliberate and crisis action planning. Phase I begins by providing an overview of the many factors that go into the operational art in campaign planning, ensuring the student comprehends key requirements such as centers of gravity and conflict termination before building a campaign plan. Phase II builds on this foundation, covers doctrinal definitions of the deliberate planning process, and has students apply this knowledge towards building their own deliberate plan. Phase III develops an operational understanding of crisis action planning and has students apply these principles through a case study and the Joint Force Employment computer tool.

# **AO 5500, Aerospace Operations**

#### 4 semester hours

The Aerospace Operations course supports the ACSC mission by equipping students to produce credible and innovative aerospace power solutions to operational level problems across the spectrum of conflict by critically examining the current and near-future capabilities of aerospace forces and their application at the operational level of war. The course is broken into three distinct phases, beginning with a study of the fundamentals of Aerospace Warfare by examining the tenants and core competencies of Aerospace Power, Aerospace Strategies and the impact of doctrine and contextual factors of Aerospace Strategies. Phase II uses the framework of the functions of Aerospace Power to analyze, in detail, strategies for the operational level employment of Aerospace Power. Students should enter Phase III as credible advocates of aerospace power, able to develop plausible strategies for its employment. The entire phase will entail a process for planning Joint Aerospace Operations in a crisis action setting as a tool for synthesizing the course concepts to develop an aerospace component course of action.

#### **AE 5500, Aerospace Execution Exercise**

# 1 semester hour

The success or failure of aerospace contingency operations is highly dependent upon short-range planning and execution process, information flow, and decision making in a time-constrained environment. This wargame-based course allows the student to participate in the centralized control of aerospace power that follows and culminates the joint and aerospace planning processes. It first introduces students to established JAOC organization, interfaces, and procedures. The students are then inserted into a scenario that forces theme to execute those procedures as members of a JAOC staff during a major aerospace contingency. This scenario concentrates on reinforcing the doctrinal principles studied in the Joint

Campaign Planning and Aerospace Operations courses—namely that the *most effective* employment of aerospace capabilities transcends the traditional force-on-force battle space during major contingencies. In addition, students take away an appreciation of the inordinate amount of work and extreme ingenuity required during centralized control to bring an air campaign to fruition.

# **GE 5500, Gathering of Eagles**

noncredit

The Gathering of Eagles is a unique program that stimulates the study of aviation history. Since its inception in 1982, more than 277 famous aviators from 24 countries have visited ACSC to participate in the "Gathering of Eagles." The "Eagles" spend time with class members, sign lithographs commemorating their achievements, and participate in "living history" interviews. These teaching interviews allow the students—tomorrow's leaders—to better understand their aviation heritage and learn lessons from those who shaped it. Research conducted by students in EL 5690, Gathering of Eagles, forms the basis for the content of this course.

#### DR 5800, Research Education

#### 3 semester hours

Students must complete either the DR 5800, Research Education, or one of the EL 5600 series, Electives, options. The ACSC Research Education Program is designed to complement the core curriculum and create research opportunities that promote professional development, innovation, and critical thinking. The ACSC Research option provides the students an opportunity to explore a topic or issue in a systematic fashion, to draw meaningful conclusions from that investigation, and to present those results in an organized, academically disciplined fashion. The Research Program has been designed to provide students the opportunity to develop their ability to define an issue succinctly; to conduct thoughtful, logical, and critical research and analysis; and elicit from students well-developed and supported conclusions and recommendations. The Research Program provides the results of student research, writing, and analysis to interested parties, including key decision makers at the highest levels of command, on relevant national security topics at the operational and strategic levels. The quality of student projects parallels the quality of projects in graduate-level education and is competitive for publication in professional journals or distribution to other comparable sources, agencies, or institutions.

#### EL 5600. Electives

#### 3 semester hours

Students must complete one of the EL 5600 Electives options or DR 5800, Research Education. The electives program option complements ACSC's core resident curriculum. The program enables students to investigate a topic in a rigorous fashion, in a seminar

setting, and under the direction and guidance of a subject matter expert. Participation in the electives program satisfies the ACSC research and writing requirement. All electives are three semester hours of credit. The college currently offers the following elective courses.

EL 5601, The War for Public Opinion: Propaganda, Public Affairs, and the Military-Media Relationship. The intense war for public opinion and support is perhaps the least understood strategic center of gravity an operational commander will face in any conflict. And yet throughout history, wars have been won or lost largely due to the population's willingness to support the operational goals of their government. This course will help prepare future operational commanders to comprehend the way the new global information environment affects the battlefield of the twenty-first century. Extensive analysis will be conducted in contemporary and historical roles that propaganda, public affairs operations, and the media have played in conflicts.

EL 5610, Teams and Their Organizational Realities. The seemingly interchangeable concepts of teams and teamwork are integral parts of modern military command and operations. Yet, despite years of hard-won experience, it could be debated as to exactly how much we truly understand about the nature of teams, their composition, and the complex interpersonal processes that allow them to function. During this course, students will have the opportunity to discuss factors influencing how teams function and perform. Concepts such as organizational practices, performance awards, and cultural factors and their influence on team behavior and performance will be analyzed in-depth. Students will critically examine situations where teams have failed to perform as expected and the consequences of these failures for the organization and mission goals.

EL 5620, Advanced Space Studies: Policy and Applications. This course is designed for students who already have a strong understanding of space policy and systems. It will leverage the collective experiences of the class to create a collaborative learning environment for advanced discussion on all areas of space. The students taking this course will reinforce their baseline understanding of space systems and understand the issues associated with developing and employing space capabilities for the future.

EL 5621, Air Logistics: Key Enabler and Operational Art Element. This course provides students lacking a background in logistics with an appreciation for the capabilities and limitations that the disciplines of aircraft maintenance and munitions, logistics plans, transportation,

supply, and contracting bring to the fight. The course includes a detailed review, historical perspectives, and prospectus pertinent to each logistical function. The synergies derived from exploiting logistics capabilities and minimizing the impacts of vulnerabilities with respect to operational planning are also emphasized.

EL 5622, Air Mobility. This course provides future military and civilian leaders from all services and the international community a better understanding of the current and evolving capabilities of air mobility. The course addresses the critical role air mobility plays and will continue to play during peace, war, and operations other than war. It also provides students with a better understanding of how the unique characteristics of air mobility—speed, range, flexibility, and responsiveness—support US national security and military strategies.

EL 5623, Future Trends and Their Impact on the Military. The international environment is changing rapidly and military officers will often be asked to cope with the consequences of those changes. History has proven that military organizations are often prisoners of history and are caught unprepared for major contextual changes. This course will preview the strategic environment and commercial and military technologies anticipated in the 2010-30 time frame to help students explore capabilities and operational concepts that could be used by the military to support US national security. The goal of this course is to familiarize the student with the driving forces and key factors that affect planning, the importance of planning for multiple futures, and how to identify signposts and indicators that given scenarios are coming to pass. Students will be exposed to various predictive and nonpredictive planning models with emphasis on scenario-based planning as a viable tool for configuring the military of the future.

EL 5624, Intelligence Operations. Joint Vision 2020 calls for decision superiority—making and implementing better decisions faster than the adversary can react. Decision superiority is only achieved through the full integration of intelligence, surveillance, and reconnaissance (ISR) operations into the military campaign. For this to occur commanders need to fully understand the ISR weapon system. This course treats intelligence as a product, a process, and a weapon. Students will conduct an in-depth study of seven intelligence disciplines, focusing on their capabilities and limitations. The future of intelligence operations and the challenges it faces in meeting the needs of decision makers will be discussed.

EL 5625, Measuring Airpower Effectiveness. Measuring how well airpower is achieving its intended purposes has always been difficult, especially while campaigns are in progress. This course will examine the criteria and methods used to measure airpower effectiveness from World War I to the present. Emphasis will be on techniques used during campaign planning and execution to decide how well airpower is accomplishing its objectives.

EL 5626, Military and Commercial Uses of Space. This course is designed for students who have a limited understanding of space systems and policy. It will examine in detail current and future space capabilities of the United States and the world. Topics include such items as: orbits, space law, space doctrine, access to space, space operations, communication, navigation, warning, weather, multispectral imaging, theater missile defense, and space policy. Space experts in the specific fields mentioned above will present the material.

EL 5627, Modeling, Simulation, & Wargaming—Theory and Practice. Models, simulations, and war games influence critical decisions in diverse activities such as planning, budgeting, manning, resource allocation, education, and strategy development. This course provides an overview of theoretical foundations of modeling, simulation, and war gaming. The course will include a study of the historical uses of these tools as well as exploring the state-of-the-art in war gaming. Finally, the course will research how to better exploit war games and simulations in the future.

EL 5628, Peace Operations and Peace Enforcement—US and International Perspectives. International peace operations will remain one of the most important tools of the United States and the international community as actions are taken to contain conflicts, support democratic transitions, provide humanitarian assistance, and protect human rights in the new millennium. Recent peace operations have left many unanswered questions regarding their effectiveness. This course asks what lessons past peace operations have given us and whether we are prepared to use those lessons to improve the chances for success in the future. In particular, this course focuses upon the future role of peace enforcement and whether the United States and its military are prepared to participate in these future scenarios. This course facilitates the student's understanding of peace operations in preparation for future command positions and staff roles.

EL 5629, Quantitative Tools for Military Operations. Quantitative tools are required to translate the intuition provided by history and doctrine into actionable tasks. The use and abuse of quantitative tools has directly led to military success and failure. World War II required the development of operations research to deliver the massive output of the "arsenal of democracy." The abuse of statistical analysis contributed to the United States' failure in Vietnam. This course provides officers with an understanding of the strengths and weaknesses of quantitative methods, allowing them to employ a powerful set of tools while avoiding their abuse.

EL 5630, The Impact of the Communications Revolution on Warfighting in the Future. The US military is currently in the midst of the most radical restructuring of communications capability since the deployment of the telephone. Previously distinct communications capabilities (voice, video, and data) are starting to converge on to a single Internet Protocol infrastructure. This course will develop an understanding of how new communications capabilities are changing operational processes by influencing logistics, personnel, and command and control capabilities. Barriers to the adoption of mission process changes will be discussed, and methods to overcome these barriers will be examined. The future of information warfare will be analyzed in-depth.

EL 5631, World Space Issues for International Officers. This course will focus on the space contribution to airpower from an international perspective. It will include military applications of space systems, distribution of space-based information, and the increased role of commercial space systems. Since the theme is international space power from a coalition perspective, this course is designed specifically for international officers. It provides information on military, civil, and commercial space organizations, systems and applications. The first part of the course will cover space concepts and US space systems, and each lesson will consist of a briefing and discussion led by various AU faculty members. Later in the course students will make presentations and lead discussions on their own country's space program, an international space consortium, or another approved topic relating to international space.

EL 5632, The Military Commander and the Law. Military commanders and other leaders face a legal threat environment that has increased substantially in scope and complexity over the past decade. This course covers a broad range of issues including areas such as: maintenance of good order and discipline, the law of armed conflict, contracts and fiscal law in a deployed environment, homosexual policy, civilian personnel issues, free speech on military installations,

environmental regulations, the Joint Ethics Regulation (JER), computer crimes, and dealing with private organizations. The course provides ACSC students with an overview of current legal issues commanders and senior leaders are likely to confront in their efforts to accomplish mission requirements.

EL 5633, The Total Force: Yesterday, Today and Beyond. World events during the post-Cold War years have brought uncertainty and significant change. Reductions in the active force have created a heavier reliance on the Reserve Component forces. This course examines the concept of the Total Force. Analysis of current US policy will highlight the debate over positive and negative aspects of Reserve and Guard utilization in the different services. Students will explore the continuing evolution of the Total Force and develop ideas about alternative future force structures.

EL 5634, Morality and War: Implications for the War Fighter. This course is designed to teach the military professional about the moral, ethical, and legal issues surrounding war-fighting duties that could conceivably involve confrontation with an enemy for the attainment of a political objective. The course will begin with an examination of the "just war" tradition and explore moral and legal considerations, proportionality, necessity, reprisals, and other issues relating to the use of force as an instrument of politics among nation-state and nonstate actors. Also, students will examine their own personal views as decision-making military professionals, views that implicitly transcend their particular individual feelings about causing casualties in warfare.

EL 5635, War Between Equals. Employing a team research approach, students will step through a modern-day US civil war, researching and evaluating forces according to scenario objectives. Using the Checkmate model, students will begin at the National Command Authorities (NCA) level and will follow a single scenario through all levels of Deliberate and Crisis Action Planning. The course will culminate with the Joint Forces Air Component Commander execution of a Joint Air Operations Plan. Students will explore the use of tools such as Information Warfare and Limited Intensity Conflicts, depending heavily upon the ACSC core curriculum.

EL 5636, Strategy and Technology. This course is designed to broaden student understanding of the relationship between technology and strategy. A variety of methodologies are used including guest lecturers, field trips, individual study, and seminar discussion. Students will have a greater appreciation for the current state of the art in a variety of fields to include: directed energy (lasers

and high-powered microwaves), sensors, communications, space systems, propulsion systems, computers, and micro-mechanical devices. The graduate will leave with a working understanding on how these technologies are likely to impact military operations at the operational and strategic level in the coming decades.

EL 5640, Aircraft Production in the First World War. This course is designed to broaden the student's understanding of industrial mobilization and aircraft production during the Great War. "Aircraft Production in the First World War" will examine the triumphs and failures in fielding aviation units by the major and minor powers engaged in the conflict. The course will also pay particular attention to differences in industrial methods and obstacles to efficient aircraft production as the war grew in intensity. In addition, the United States' obsession with sending an air arm to fight "over there" after April 1917 will also be emphasized.

EL 5641, A History of Mutiny, Desertion, and Insubordination. Morale, disorder, resistance, and disintegration have concerned military commanders throughout the ages. This course will investigate the underlying and immediate causes of mutiny, desertion, and insubordination in armies, navies, and air forces from a historical perspective. It will analyze the various avenues and levels of resistance to military authority, investigate both underlying causes of discontent and immediate triggers of insubordination, and examine the methods adopted to deter, crush, or alleviate unrest in the ranks.

EL 5642, Revolutionary Innovation in Military Organizations. Many observers believe that the US military is on the cusp of a revolutionary change in how it prosecutes war at the operational level. The purpose of this course is to give the student a clear understanding of revolutionary innovation from theoretical, historical, and practical perspectives. It begins with an exploration of the concepts of revolutionary innovation. It then explores US revolutionary innovation processes, moves through contemporary and historical cases of revolutionary innovation, and concludes with discussion of future force structure. At the end of this course, the student will be well equipped to evaluate the prospects for revolutionary change in the US military.

EL 5643, Small Wars and Counterinsurgencies. Military planners often focus on large-scale, conventional warfare. However, much of the conflict of the last two centuries has been smaller scale warfare and counterinsurgency. Western colonialism and imperialism in Africa and Asia were important phenomena of the nineteenth and the twentieth centuries. Many crises today are a partial result of past

Western expansion. This course will explore basic problems of military strategy, tactics, and logistics, with specific application to French, British, and American experiences in colonialism.

EL 5644, The Air War Over Serbia: A Case Study in the Application of Airpower. The last 10 years has seen three major tests for the application of airpower. The latest example, the air war over Serbia (AWOS), served as a unique laboratory for the testing of airpower theory. This course will examine the prelude to the conflict, the design, planning, and execution of the air war, and will evaluate the results. It will provide an opportunity to compare and contrast results of the AWOS with other air campaigns waged before and after the end of the Cold War. Finally, the AWOS will be examined for evidence of possible changes in doctrine and for lessons useful for future campaign planners.

EL 5645, The American Way of War: The US Army from Appomattox to Desert Storm. Significant debate is taking place over basic concepts of current US Army organization and future requirements. The antecedents of this debate extend back into American history and have been central in shaping the course of the American military. This course examines the development of the modern US Army since 1865 through a critical analysis of its organization, doctrine, and performance in various wars.

EL 5646, The Challenge of Command in the American Civil War. This course is designed to expose students to a broad understanding of the American Civil War by focusing on two major areas. First, the politics, military strategies, operational art, and tactics employed during the Civil War will be studied to increase the student's understanding of warfare and this war in particular. Second, the challenges faced by commanders in this conflict will be analyzed to determine relative successes and failures in leadership on both sides.

EL 5647, The Second World War and the Operational Art. This course is constructed around an examination of important campaigns of the Second World War. World War II was a watershed in the evolution of modern roles and missions and offers many important lessons dealing with operational innovation, the integration of new technology, effective interservice cooperation, and other topics of current interest. Issues facing today's war fighters will be examined from a historical perspective. Students will conduct an in-depth examination of selected campaigns and develop an understanding of the impact of those campaigns on the development of modern operational doctrine.

EL 5648, A History of Airborne Operations. This course provides the student with an in-depth operational analysis of parachute forces in the twentieth century. A comparison of the development of airborne forces and their application in combat will assist the student in understanding the role that airborne forces have played in major combat operations and campaigns. Factors affecting the success of airborne operations, including transportation, timing, weather, opposing forces, leadership experience, and mission planning will be analyzed.

EL 5649, The Intellectual and Institutional Elements of Air Force Doctrine. This course examines important intellectual and institutional elements that contribute to understanding the development and application of AF doctrine. In addition, this course examines the relationship between service and joint doctrine. Students will better comprehend the complexities inherent in defining, creating, applying, and modifying military doctrine in general, and AF doctrine in particular. The relationship between theory and doctrine, the impact technological change on doctrine. the creation institutionalization of doctrine, the dynamics of changing doctrine, and the relationship between AF and joint doctrine will be examined in-depth.

EL 5650, The Development of Airpower Thought and Practice. This course is designed to explore the evolution of airpower thought and practice. It will emphasize roles and missions as formulated during periods of airpower development and then explore the conduct of those roles and missions during hostilities. The course will be taught mostly from the viewpoint of the United States. However, it will also explore parallel developments in countries such as Germany, Japan, Russia, and Britain. Initially, the historical method will be used to explore each period studied. Later sessions will examine contemporary issues facing the Air Force and strategies to face these issues.

EL 5660, Causes and Prevention of War. Why do states fight? This course challenges conventional interpretations of this question by fusing together a wide variety of thought-provoking literature and films. Students will analyze the great issues that societies struggle with—war, power, honor, justice, and peace—and will participate in extensive seminar discussion. The dominant theoretical, philosophical, and historical accounts of war and its causes will be examined and practical solutions to the "war problem" will be discussed.

EL 5661, Dirty Politics: Dictators, Terrorists and Godfathers. This course explores the growing link between human rights and international security in a globalized world. Ethnic cleansing, suicide bombings, and illegal trafficking of narcotics create conditions that encourage civil distress. Students will examine broad trends in the international geopolitical system as well as subnational phenomena for methods of developing sound strategies to counter these conditions.

EL 5662, Islam and Islamism: Radical Political Religion, Ideology and the State. Radical political religion is perhaps the least understood among the various ideologies which, in the aftermath of the disintegration of the Soviet Union, are challenging the established order of nation-states. This course treats Islamism as a radical political religion with specific historical and political determinants. Students will examine concepts presented in this course and extrapolate attributes that can be applied to similar non-Islamist movements. A comparative approach of study will provide the student with working hypotheses by which tensions between states and societies may be evaluated. This course will help prepare students to comprehend the way radical political religion can shape the geopolitics of the twenty-first century.

EL 5663, Military Intervention in the Post-Cold War Era: Where and Why the US Might Intervene in the Near Future. The United States has many important interests strewn throughout this vast and oftenviolent world. Moreover, the end of the Cold War has reduced the risks of using conventional military force in the international arena since the threat of a nuclear Armageddon has diminished. This course will challenge students to conduct analyses of some of the contemporary "hot spots" around the world and how they might influence US interests.

EL 5664, Weapons of Mass Destruction: Challenge and Response. The spread of chemical, biological, and nuclear weapons, more commonly known as weapons of mass destruction (WMD), confronts military officers with one of the least understood and most unpredictable challenges they will face in their military careers. This course is designed to introduce officers to the challenges posed by the spread of WMD and to understand responses to reduce this threat.

EL 5665, The United States as a Great Power. An examination of US foreign relations from the emergence of the nation as a major world power to the present. This course will explore what it means to be a "great power" in the international system, why Americans sought

such status for their nation, and how the United States combined diplomatic, military, economic, and other instruments of national policy to achieve and maintain this objective.

EL 5666, War and Society in 20th Century Central Europe. This course is constructed around an examination of war and conflict in Central Europe from 1900 to 1999; from the Balkan wars to the Balkan wars. It is not primarily a catalogue of campaigns and battles but an attempt to consider the broader patterns of war and conflict in this volatile region. As such it is a study of politics and society as well as military affairs. Also, the course considers the relation of conflict in the region to European and international affairs, both from the standpoint of small states caught up in world events and outside intervention. The focus of the course is scholarly inquiry and historical scholarship as opposed to policy and operational considerations. Familiarity with the complex history of the region and advanced scholarship stands to offer the military professional a more sophisticated appreciation of the strategic environment as well as the phenomena of war.

EL 5667, The Arab-Israeli Conflict. The Arab-Israeli conflict is one of the most well known and longest running conflicts in the world. It is at once a political, religious, nationalist, regional, and global conflict whose roots can be traced back hundreds if not thousands of years. The Arab-Israeli conflict today can be divided into three basic tracks: (1) the Israeli-Palestinian conflict over control of the occupied territories and Jerusalem, Palestinian statehood and its borders; (2) the Israeli-Syrian conflict over control of the Golan Heights, Syria's recognition of Israel, and Syria's role in influencing events in Lebanon; and (3) the Israeli-Lebanese conflict over border security, recognition, and formal peace. This course will introduce students to the history and current dynamics of the Arab-Israeli conflict. US interests and participation in the conflict and possible future involvement will also be discussed.

EL 5690, A Gathering of Eagles (GOE). A Gathering of Eagles is both a group research technology project as well as an opportunity for the students and faculty of ACSC to meet noted aviation pioneers. Started in 1982 to stimulate interest in aviation history, GOE is an annual series of events hosted by ACSC. Individuals who have made significant contributions to aviation heritage are invited to spend several days with ACSC students to share their experiences and lessons learned. Forums include face-to-face meetings, on-stage interviews, panel discussions, and social events. The program culminates in a presentation of the Eagles at the ACSC Graduation Ball.

EL 5691, Prairie Warrior. This course is a joint war game played with the Army Command and General Staff College at Fort Leavenworth, Kansas. Areas covered will include the spectrum of joint war fighting, from the formulation of the CINC's OPLAN through the execution of an air operations plan in support of CINC objectives. Particular areas of study will include exploration of doctrinal disagreements, battle-space management, and synchronization of air and land operations. Due to the classified nature of equipment used within the Air Operations Center (AOC), only US students may participate in this course.

#### **Curriculum Summary**

	Academic Contact/ Credit Hours		
	Contact	Semester	
Course Title	Hours	Hours	
OC 5500, Orientation Program	32	O	
LC 5500, Leadership and Communication			
Studies	124	8	
IR 5500, National and International Security			
Studies	45	3	
NW 5500, Nature of War	45	3	
AP 5500, Airpower Studies	45	3	
NP 5500, National Planning Systems	21	1.5	
JF 5500, Joint Forces	45	3	
JP 5500, Joint Campaign Planning	40	2.5	
AO 5500, Aerospace Operations	60	4	
AE 5500, Aerospace Execution Exercise	40	1	
GE 5500, Gathering of Eagles	12	0	
Research and Electives	45	3	
TOTAL	554	32	

# **Other Programs and Activities**

ACSC conducts several activities that support the resident core curriculum and enrich the experience of its students and their families during the academic year.

**Commandant's Specials.** These special presentations enhance the resident curriculum by giving students and faculty the opportunity to interact with distinguished leaders and experts from across political, economic, and military environments. Speakers, past and present, include members of Congress, ambassadors, and top civilian and military leaders in DOD.

**Aerospace Power Demonstration.** The entire student body visits Eglin AFB, Florida, for an airpower demonstration. Students view static display aircraft, current and future weapons, and air operations center equipment demonstrations. The visit culminates with a live-fire demonstration of the full spectrum of airpower capabilities.

# **International Officer Program**

International officers have attended ACSC every year since 1946. During its 54-year history, the college has graduated more than 2,500 international officers from 92 nations. Before attending ACSC, international officers attend a six-week preparatory course conducted jointly by the International Officer School (IOS) and ACSC. This course increases the officers' ability to speak and understand the English language while familiarizing them with the USAF organization and mission. In the past, international officers graduated after completing seven months of the 10-month course. Beginning with the 1994 class, international officers attend ACSC the entire academic year, further enhancing their ACSC learning experience. During the year, these officers participate in field trips that supplement the curriculum objectives. As part of the DOD information program, they tour Washington, D.C., and military and aerospace facilities in Alabama, Florida, and Georgia.

# **Athletic Programs**

The ACSC athletic program is designed to improve the quality of life for students and faculty by creating and sustaining an environment that promotes personal health, fitness, and professional growth. With that in mind, the objectives of the program are to help all personnel pass the fitness test on the first attempt and to put in place a program that fosters social interaction and team building in conjunction with healthy competition. The athletic program includes competitive seminar and intramural sports. It also includes mandatory participation in school scheduled sports activities by all 44 seminars and a faculty team in three sports during the scheduled sports days. The ACSC sports activities are softball, bowling (during winter/rainy weather conditions), and volleyball. Students and faculty also compete in base intramural activities as well. Finally, students and faculty members are afforded the opportunity and are encouraged to engage in personal fitness/aerobic activities at least three times per week. ACSC conducts annual fitness testing in accordance with AFI 40-501, The Air Force Fitness Program.

# **Spouse Program**

The Spouse Program helps integrate resident students' spouses into the ACSC experience. It offers many opportunities for spouses to learn, grow, and share the ACSC experience with students and faculty. This program acquaints spouses with the college's academic requirements, increases their awareness of current events and DOD issues, and provides opportunities for personal growth and development. Participation is completely voluntary, and the spouses determine the program's scope and direction.

# **Nonresident Program**

Established in 1948, the ACSC nonresident program provides intermediate-level PME to officers unable to attend in residence. In 1969, ACSC expanded the scope of the program by implementing a seminar program to provide for the sharing of opinions, expertise, and experiences among the seminar members. Both the seminar and correspondence programs achieved Phase I Joint PME accreditation in 1992 and were reaccredited in 1997. In 1999 the nonresident program was placed under the dean of distance learning (DL). The nonresident program provides PME to about 85 percent of all AF majors and major selects.

Today, technology offers opportunities to improve traditional seminar and correspondence programs. The DL staff continually explores new and better ways to meet the demand for PME of midcareer officers stationed throughout the world. By using computer-based education and satellite technologies, the nonresident course is narrowing the gap between resident and nonresident education. These advances clearly identify ACSC as a pacesetter in AU and the educational community.

**Eligibility.** ACSC nonresident programs are offered to US active duty, Reserve, and National Guard major selects and above from all services. DOD civilian employees in the grade of GS-11 or above, or equivalent, may also enroll. Civil Air Patrol officers serving in the grade of major or above may enroll in the correspondence program only. International applicants for nonresident ACSC programs must be a major selectee or higher or equivalent grade civilian employees of the military department of a country or international organization assigned to a DOD billet. International officers may also enroll through the Foreign Military Sales (FMS) training sponsorship program. Reference AFI 36-2301, *Professional Military Education*, and visit the ACSC public Web site: http://www.acsc.maxwell.af.mil, and the Education and Training Course Announcements Web site at http://etca.keesler.af.mil, for further information.

**Program Description.** The ACSC nonresident curriculum is designed to support the three components of ACSC's mission statement: to prepare leaders for higher level command and staff responsibilities; to prepare leaders to understand, plan, and execute components of an air campaign and the joint campaign planning process; and to prepare leaders to think logically and critically at the operational level in order to expand and advance the body of aerospace knowledge. The course of study is an integrated process. It begins with the studies designed to enhance the students' leadership and command skills and concludes with an AF exercise and lessons on strategy and commander's perspective. In between, the course explores international relations, why nations go to war, and what the Air Force brings to the fight for the joint forces commander.

The ACSC distance-learning curriculum is delivered via printed books, CD-ROM, and the Internet. Students receive an integrated multimedia curriculum that includes textbook readings, video, and interactive applications. Students have 18 months to complete this program and must achieve a minimum score of 70 percent on each of six examinations and complete four on-line exercises. Students may choose one of three methods to complete the program. The same personnel record entry (nonresident) is made for all three forms of enrollment upon successful course completion.

Correspondence (self-study). This method affords students the opportunity to choose the time and place of study. ACSC provides the framework for completing this program by providing a recommended schedule for students to follow. Students may enroll at any time throughout the year.

Seminar. In this 11-month program students meet weekly (on base) in a forum designed for the free exchange of ideas and opinions on vital issues facing the USAF, DOD, and the nation. Seminar participants share unique background experiences and technical expertise. ACSC provides the framework for conducting the seminar program by providing a schedule for the seminars to follow. This seminar is composed of eight to 18 members and begins in August of each year.

Cyber-Seminars. In this 11-month program students meet weekly in a "cyberspace" forum designed for the free exchange of ideas and opinions on vital issues facing the USAF, DOD and the nation. Seminar participants share unique background experiences and technical expertise. Beginning in August of each year, students conduct weekly meetings in the ACSC Electronic Classrooms. ACSC provides the framework for conducting this seminar by providing a schedule for the seminars to follow. The seminar is composed of eight to 15 members. (NOTE: Each student

must subscribe to an on-line service providing Internet access and is financially responsible for all costs associated with their on-line services. Students choosing this method of study must contact the ACSC Distance Learning Department upon enrollment.)

ACSC has a Distance Learning Electronic Campus on the Internet. Any student enrolled in the ACSC program may have access to the campus. The campus contains a library with lesson plans, audio/video files, readings, and interactive computer simulations. Additionally, students can post messages on the bulletin boards and join ongoing discussions in the chat areas. For additional information or to obtain access to the campus, contact ACSC Distance Learning Department at DSN 493-7901, (334) 953-7901, 1-800-316-7042 or E-mail: acscdl@maxwell.af.mil.

The ACSC nonresident program is organized into the following seven curriculum blocks.

**00030A:** Lessons include Military Leadership in the New Millennium; The Role of Values in Military Leaders; The Role of a Leader in the Development and Maintenance of Organizational Culture; The Changing International System; The National Security Strategy (NSS) of the United States; The National Military Strategy of the United States and The Threat of the Spread of Dangerous Technologies; The Threat of Regional, State Centered, and Transnational Threats; The Threat of Failed States, and Environmental and Health Threats.

**00030B:** Lessons include The Early Western Perspectives on the Nature of War; The Modern Western Perspectives on the Nature of War: Islam; The Non-Western Perspectives on the Nature of War: Islam; The Non-Western Perspectives on the Nature of War: Chinese & Revolutionary; An Analytic Framework for the Study of the Nature of War (Part I)—Defining and Classifying War; An Analytic Framework for the Study of the Nature of War (Part II)—Why People and States Fight; and War Termination and Conflict Resolution.

**00030C:** Lessons include Airpower in World War I; The Interwar Airpower Theorists; Airpower in World War II; Airpower in Korea and the Nuclear Age; Airpower in Vietnam; Aerospace Power in Desert Storm; Aerospace Power Today and Tomorrow; Developing a Personal Leadership Philosophy; The Role of a Leader in the Development and Maintenance of an Effective Air Force Team; and The Leader's Role in Mentoring and Stress Management.

**00030D:** Lessons include Doctrine and Policy; National Leadership and Joint Warfighting; Defense Planning Systems; Campaign Planning; Campaign Planning Principles; Deliberate Planning; Crisis Action Planning; Planning for Military Operations Other Than War; and Multinational Planning Considerations.

**00030E:** Lessons include Organizations, Staffs and the Functional Components; AFFOR Doctrine and Capabilities; MARFOR Doctrine and Capabilities; NAVFOR Doctrine and Capabilities; SOF and the JFC; Operating in a Multinational Environment; Space; Logistics; Intelligence; Communication; Information Operations; and Force Protection and Employment Considerations.

**00030F:** Lessons include The JFACC and the EAF; The JAOC; Counterspace & ISR; Counterinformation; Airlift and Air Refueling; Counterland and Strategic Attack; Counterair; Aerospace Component Forces; Methods of Analysis; Objectives to Aerospace Strategy; JAOP 1 and 2; Targeting and the ATO; Command Challenges and Resources Available to the Leader; and Preparing for Tomorrow while Leading in Today's Air Force.

**00030G:** Lessons include an Air Force Exercise; Strategy; and The Commander's Perspective.

#### **Academic Credit**

The ACE recommends 27 semester hours of graduate credit for completion of the ACSC resident or nonresident correspondence or seminar curricula. The credit recommendations are

- ? 9 semester hours in military history and evolution of strategic thought,
- ? 6 hours in regional studies,
- ? 6 hours in defense resource management, and
- ? 6 hours in defense policy and national and international security.

ACSC graduates are eligible to apply these credits to their personal educational endeavors. However, ACE only recommends credit. Each college or university decides whether to accept these credits and apply them toward a specific degree.

# AIR WAR COLLEGE

Maj Gen Bentley B. Rayburn, Commandant Col Michael Slinkard, Vice Commandant

#### Internet address

http://www.maxwell.af.mil/au/awc/awchome.htm

**Mission:** To educate senior officers to lead at the strategic level in the employment of aerospace forces, including joint, combined, and coalition operations, in support of national security.

The War Department established the Air War College (AWC) in 1946 at Maxwell Field, Alabama, and the college has operated continuously since that time except for a period of six months during the Korean conflict. The student body consists of a select group of senior military officers and civilians with diverse backgrounds who are brought together for 10 months of graduate-level study.

**Goals:** Conduct a rigorous educational program that emphasizes aerospace forces and the application of these forces in joint, combined, and coalition military environments. Consequently, the program contributes to the professional development and motivation of senior officers. The AWC course of study broadens the graduates' understanding of, and refines their ability to analyze and articulate,

- ? current and future threats to the United States and its allies, and then develop alternative military employment concepts and capabilities appropriate to counter those threats;
- ? national and military strategies through the study of history, and then formulate and evaluate military strategies appropriate for current and anticipated situations;
- ? the roles and unique characteristics of airpower—speed, range, flexibility, precision, and lethality—in supporting US national security objectives across the full spectrum of conflict;
- ? the role of national space power as derived from synergy among the four components of the US space program (civil, commercial, national security, and military);
- ? the evolutionary development and utility of the military doctrines of the United States and other major world powers;
- ? US national security policy and the process of formulating and implementing that policy;

- ? contemporary international and national security environments and their influence on US security interests and on the formulation of national security policy;
- ? the values, attitudes, and ethical factors essential to the professional officer; and
- ? the functions, special requirements, and challenges of command, leadership, and management of large, complex organizations specific to senior leaders.

Fulfillment of the mission of AWC presents a dual challenge—academic and professional. To meet these challenges, the school develops the knowledge, skills, and attitudes significant to the profession of arms with emphasis on aerospace power and its application in joint and combined operations. The senior AF professional school, AWC annually educates approximately 265 resident and 3,800 nonresident students from all US military services, from federal agencies, and from 45 other nations.

AWC is comprised of a command section, two support directorates (students and operational support), two academic directorates (academic affairs and nonresident studies), and two research centers. The resident program curriculum is guided by the dean of academic affairs within three departments—Leadership and Ethics, Warfighting, and Strategy and International Security. The two research centers that provide enhanced research opportunities within the resident program are the USAF Counterprofliferation Center and the Center for Strategy and Technology.

The college's teaching faculty includes 40 military members and 28 civilian scholars. Seven of the military faculty represent the other US military departments. In addition, seven Air University advisors assigned to AU are available to teach and advise at AWC. These advisors represent the US Marine Corps, US Army, US Navy, German Air Force, Royal Air Force, Central Intelligence Agency, and Department of State.

# **Resident Program**

AWC resident program consists of one class for each 10-month academic year. The class membership includes persons from each US military service, employees of selected civilian agencies of the federal government, and officers from the international community of nations.

# **Prerequisites and Selection**

The Central Senior Service School Selection Board, Headquarters USAF, chooses AF officers who have demonstrated an outstanding potential for senior command and staff positions to attend the AWC. Lieutenant colonels and colonels—or the equivalent in Navy rank or civil service grades—are eligible to attend AWC. Additionally, officers from the US AFRes, ANG, and other US military services, select international officers, and US federal civilians may attend. The *Air Force Education and Training Course Announcements (ETCA)*, formerly Air Force Catalog 36-2223, *USAF Formal Schools*, provides additional information.

# **Degree-Granting Authority and Eligibility**

Congress has granted authority to the AU commander to confer the master of strategic studies degree upon graduates of AWC who fulfill the requirements for that degree. To be admitted to the master's degree program, an individual must be selected to attend the AWC resident program and hold a qualifying undergraduate degree. The undergraduate degree requirement is for the degree program and is in addition to admission to the college. Students not having a baccalaureate degree will be allowed to attend AWC and will, upon graduation, receive the AWC diploma but will not be awarded the master's degree.

The AU Registrar verifies degree status for all AF officers to include Guard and Reserve officers. US applicants other than AF officers must submit, to the AU Registrar, official undergraduate transcripts of credit earned from all previously attended institutions of higher education.

International officers (IO) interested in pursuing the master's degree must submit the following information to the AU Registrar to assess eligibility:

1. Official score sheet of the Test of English as a Foreign Language. The TOEFL is not required for international officers from countries where the official language is English. The minimum acceptable score for *unconditional* admission to the master's degree program is 540 for the paper-based test (207 for computer-based test). The minimum acceptable score for *conditional* admission is 500 for the paper-based test (173 computer-based test). When taking the TOEFL, enter **9069** for AU as the institution code. Students admitted conditionally must retake the TOEFL after beginning AWC classes. A faculty committee must evaluate the academic progress of any students who do not achieve a score of 540 on the retest to determine whether or not they will be allowed to continue in the degree program.

- 2. Official transcripts (academic records) of previous degrees with certified English translations. Diplomas are not sufficient but should be included with academic records.
- 3. A document-by-document evaluation of the academic records by an independent foreign credentials evaluation service that is a member of the National Association of Credential Evaluation Services or the National Association of Foreign Student Affairs: Association of International Educators (NAFSA:AIE) to determine if the records are equivalent to a US four-year bachelor's degree. Applications for this evaluation will be available from the AU Registrar during in processing at IOS. When requesting the document-by-document evaluation, the purpose for the evaluation should be stated as: "further education" or "admissions requirement for master's degree program." A copy of the evaluation must be mailed to the AU Registrar.

It is the responsibility of each individual to pay costs associated with the TOEFL and credential evaluation. Both the bachelor's level equivalency and minimum score on the TOEFL must be met to be eligible for entry into the master's program. The undergraduate degree and English proficiency requirements are for the degree program and are in addition to prerequisites for admission to the college. Students not having a baccalaureate degree or making the minimum TOEFL score will be allowed to attend AWC and will, upon graduation, receive the AWC diploma but will not be awarded the master's degree.

#### **Core Curriculum**

Students must complete the 33-semester hour AWC resident program with an overall grade point average of 3.0 on a 4.0 scale to earn award of the master's degree. The core curriculum consists of four major areas: leadership and ethics; international security studies; strategy, doctrine, and airpower; and war fighting. AWC redesigned the curriculum to better educate officers to lead and fight tomorrow's wars and to embrace accelerating change as the norm. The curriculum represents a fundamental refocusing of senior-level professional military education brought about by the end of the Cold War (which caused changes in national priorities), declining force size, a less stable world, and an accelerating rate of change. These factors require US military forces to alter the way they think about deterring and conducting war.

### **Resident Program Course Descriptions**

The AWC resident curriculum consists of the following course offerings by the Departments of Leadership and Ethics (DFL); Strategy and International Security (DFS); and War Fighting (DFW).

#### **Dean's Days**

AWC introduces the academic year with four instructional periods known as "Dean's Days." Under the leadership of the Dean of Academic Affairs, the three academic departments develop these instructional periods to highlight key themes that will be developed throughout the larger curriculum.

## **DFL 6200, Leadership and Ethics**

4 semester hours

The Department of Leadership and Ethics educates students in the skills needed to move from tactical levels of leadership to strategic levels of leadership. The course is based on two key assumptions: first, students are already successful leaders, but the challenges they will face in the future will be significantly different from those they faced in the past; and second, students can significantly improve their development in areas vital to success as strategic leaders. The focus is on helping students develop the vision, capacity, critical thinking skills, creativity, communication abilities, strategic competencies, and moral values to meet the challenges of a rapidly changing environment. The program includes a detailed assessment of each student's personal leadership development that helps them build a conceptual framework and plan for lifelong personal growth.

## DFS, Strategy and International Security, offers two courses:

## ISS 6300, International Security Studies 4 semester hours

International Security Studies analyzes the development and implementation of US national security. The purpose of the course is to educate senior officers on the development and implementation of national security strategy.

The first half of the course, *National Security & Decision Making*, analyzes alternative US strategies for achieving national security in today's world and the process by which such strategies are developed.

The second half of the course, *Global Security*, surveys the current international environment and examines the roles national, nonstate, and regional actors play in shaping the global environment.

The course prepares students to articulate the national, regional, and international security issues shaping the global environment. It also seeks to help them understand and be prepared to participate in the US government's policy process. Students should be able to develop strategies for coping with challenges in the international arena and to assess alternative approaches to national security considering all elements of state power, including political, economic, cultural, and military.

## SDA 6400, Strategy, Doctrine, and Airpower 5 semester hours

The Strategy, Doctrine, and Airpower Course instills in students an understanding of the roles of strategy, doctrine, and the employment of aerospace power in national security. The course builds on the following assumptions. First, strategy is based on time-tested principles. Second, strategy and doctrine are inextricably linked, and an understanding of both is critical for the senior leader. Finally, wars test the validity of specific strategies and doctrines with important lessons for the leaders of today and tomorrow. With these assumptions in mind, the course uses history—particularly the history of air and space power—as a vehicle for developing an understanding of air and space forces employment in support of national security today and in the future.

#### DFW 6500, Warfighting

#### 9 semester hours

War fighting prepares senior officers to apply critical thinking when developing joint and multinational war-fighting strategies in support of the National Military Strategy and when analyzing the combat capabilities of all military forces with an emphasis on the application of aerospace power in a joint/coalition environment. The course examines current and future USAF force structure and employment within the scope of the National Military Strategy, as well as the emerging concepts of sister service war-fighting strategies. Additional emphasis is placed on the emerging concepts raised by JV-2020 and concepts emerging from AF Title-X and war games. Additionally, the course prepares future senior leaders to analyze the features of individuals, groups, and states that have traditionally caused conflict, avoided fighting, or caused peace; the forces of change that will affect conflict and war in the future; and the strategic leadership required to meet the challenges of war and peace. Emphasis is placed on the serious responsibility of senior leaders to anticipate and understand the causes of war, avoid war when possible, anticipate and adjust to the increasing rate of technological change, make strategic decisions that incorporate key technologies into military operations, and formulate an effective strategy that ensures US leadership in a complex international system.

#### **Core Electives Program**

#### 6 semester hours

The Core Electives Program (CEP) offers a variety of courses to support the core curriculum. It complements the core offerings required by the Departments of Leadership and Ethics, Strategy and International Security, and War Fighting. It also supports the various other components of the AWC curriculum. The CEP offers opportunities for structured in-depth learning as well as for broadening horizons essential for strategic leaders. CEP has three major objectives:

- 1. Enhance and complement the core curriculum by providing students with opportunities to achieve greater depth and breadth of understanding in issues of special interest.
- 2. Provide the AWC curriculum with the flexibility to adapt quickly and proactively to dramatic changes sweeping the international and domestic security environments.
- 3. Inspire and enable students to pursue specialized research.

Core Electives Requirements: Elective courses are categorized as "Blue" (graduate-level aerospace power), "Red" (other graduatelevel), and "White" (not graduate-level but relevant to senior officer development). All students must complete four core electives (in addition to other requirements) in order to graduate. At least one of the four core electives must come from the Blue category and an additional two electives must come from either the Blue or Red categories. The remaining one elective may be taken from any of the three categories (Red, White, or Blue). Additionally, students may enroll in the "Commandant's Professional Studies Paper" elective and earn either Red or Blue credit. A "Directed Study" course may also fulfill a single Red or Blue (see discussion concerning directed-study electives below). Thus, one Blue, two Red, and one White electives satisfy requirements for graduation; alternately, two Blue and two Red or four Blue electives satisfies the requirements.

### **Commandant's Professional Studies Paper**

EL 6116 CPSP I	EL 6117 CPSP- Airpower I
EL 6118 CPSP II	EL 6125 CPSP- Airpower II
EL 6120 CPSP III	EL 6127 CPSP- Airpower III

The Commandant's Professional Studies Paper (CPSP) is an opportunity for AWC students to engage in a substantial research project during an elective term. The CPSP involves the conduct of original research, and thus allows students to develop the intellectual skills that original research requires. Students may choose to research and write on a topic of their own interest, or they may select a topic from the lists of research interests provided by major commands and other military and civilian organizations. The expected length of a CPSP is around 25 pages, though they may be longer.

With the author's permission, Air University places some papers on the Internet, via the AU Web site, and provides copies to the Defense Technical Information Center and the Air University and Air Force Academy libraries.

The CPSP provides students an opportunity to develop the skills of critical analysis and strategic thinking. To that end, the paper has the following objectives:

- 1. To provide students the opportunity to conduct research on a topic of their choice.
- 2. To assist students to conduct thoughtful, logical, and critical research and analysis.
- 3. To share the results of student research, writing, and analysis with key decision makers at the highest levels of command.
- 4. To assist students, if they desire, in submitting papers for publication in Air Force, sister service, and other professional journals and periodicals.

## **Special Projects**

Students may participate in special projects to fulfill the requirements of an elective course "Directed Study" or CPSP, depending on the nature and scope of the project. The student(s) will develop a project proposal with the assistance of a faculty member. The associate dean for Research and Electives will evaluate the proposal in the context of the overall academic program and make a recommendation through the dean of Academic Affairs to the commandant on the appropriate elective offset and specifically whether a Blue, Red, or White elective credit should be granted. Any allocations of funds for the project will be the responsibility of the organization seeking the research and evaluation.

#### **AY02 Core Blue Elective Courses**

Course Dept.

**EL 6123 Directed Studies - Airpower I** 

DFB

**EL 6131 Directed Studies - Airpower II** 

**EL 6132 Directed Studies - Airpower III** 

Students interested in intensive work on a particular topic can develop, with a faculty member, a research agenda designed to give them an in-depth understanding of the subject. In order to enroll in this course, a student should develop, with an instructor, a research proposal and a reading list. Enrollment is limited and requires the approval of the associate dean for Research and Electives. The emphasis of this study program is "Airpower" and the student is awarded Blue elective credit.

#### **EL 6210 Art of Command**

DFL

Many AWC students have served as squadron commanders. After graduation, command at the group level and higher will promise even greater challenges than those encountered at the unit level. What skills and attitudes are required to command at group level and above? How do personality, unit mission, situation, and other variables affect command? What can we learn from the lives and careers of previous great commanders? Are the qualities and skills required to be an effective air commander different from those required to be an effective ground or sea commander? What staff agencies are available to assist the commander? This course will address these questions.

#### EL 6415 Airpower Theory, Doctrine, and Strategy, 1910-1945 DFS

This course will examine the development of the theories, doctrines, and associated strategies of the employment of airpower in war from the beginning of flight through the formative era and into the nuclear age. We will start with the advent of the airplane, but the focus will be upon the men and ideas which gave rise to the earliest theories about the use of aircraft in warfare. The course thus examines the development of the earliest strategic uses of airpower and moves into the origins and sources of doctrines for the employment of airpower.

## EL 6416 Airpower Theory, Doctrine, and Strategy, 1945-Present

**DFW** 

This course studies changes in theory and doctrine within the changing strategic contexts from 1945 to the present. It stresses the complex nature of strategic requirements and the strengths/limitations of doctrinal and technological adaptations to change.

#### **EL 6472 International Security and Nuclear Issues**

**DFS** 

This elective is designed as a policy-level course to address a broad spectrum of related issues. Is traditional arms control dead? Is nuclear deterrence irrelevant? We have already been in the post-Cold War era for over 10 years. The changing nature of international security affairs demands a reexamination of the threat to international security. This course poses such a reexamination in three phases: (1) a brief historical foundation, process of arriving at our current nuclear policy; (2) technologies of nuclear proliferation and programs the United States is undertaking to prevent it; and (3) future plans and how to achieve them. Discussions will focus on current issues and challenges facing policy makers today: how low to go, how to pursue future reductions, the impact of policy decisions such as NMD, and the implications of these issues on our strategy, our force structure, and our allies. In many cases, guest discussion leaders are those currently participating in the USG decision process.

## **EL 6513 Air Mobility**

DFW

This elective provides students a better understanding of the current and evolving capabilities of air mobility and the critical role it plays and will continue to play during peace, war, and operations other than war. During the course, class members will draw from historical references, student presentations, classroom discussion, and guest speakers to gain a better understanding of how mobility resources and capabilities evolved, future directions in air mobility, and the resultant impact on our current and future national security and military strategies.

## **EL 6514 Future Force Planning**

**DFW** 

Enrollment in this course is by instructor permission. This AWC elective course is designed to provide the student both an overview of service force development processes and the opportunity to discuss trends that may portend changes to these processes in the future. Using case studies of actual force development activities and decisions, the student will examine a number of issues that have affected the development of forces in the past and may also affect it in the future.

## EL 6517 Command & Control of Aerospace Power: Warfighter's Perspective (Classified, US Personnel)

**DFW** 

Enrollment in this course is by instructor permission. This is an advanced course specifically targeted towards those who may be given the opportunity to command in an AOC, its sister-service equivalent, or to integrate their units' efforts in the application of aerospace power. Its content will, by its nature, complement the JLASS electives. Initially, the student will be challenged with analyzing the requirements for the proper development of future aerospace leaders. The bulk of the course will then analyze and synthesize the critical elements in the command and control of planning, execution. assessment. aerospace power, identification as well as surmounting obstacles while preparing for future challenges. The course will include a field trip to observe either a Blue Flag or Fleetex, or both, from the perspective of the command and control of aerospace power. This course will be mentored by a blue ribbon panel of retired general officers whose expertise is in command and control and the application of aerospace power. Nominations of students for this elective will be taken from the seminar directors.

#### **EL 6518 JFACC Introduction**

DFW

This course is designed as a base-level introduction of past, current, and future issues concerning the JFACC. It is specifically intended for operators who may be assigned to a JFACC or Joint Air Operations Center (JAOC) staff. This course addresses the roles, operations, command relationships, and responsibilities of the JFACC in support of a JFC. It is not intended for experienced JFACC or JAOC staff officers.

## EL 6519 JLASS-I (Classified, US Personnel) EL 6520 JLASS-II (Classified, US Personnel)

**DFW** 

JLASS is a war game that focuses on the strategic and operational levels. It is played by selected students from all of the Senior Service Schools (SSS). AWC plays as the JFACC. In JLASS-I students develop options in response to multiple regional crises and prepare air campaign plans (in coordination with the other SSSs) to support CINC objectives in the event of a major theater war. JLASS-II is a six-day war-fighting exercise that brings the SSS students together here at Maxwell and allows them to execute their plans in a dynamic environment at the AFWI. JLASS-I, the distributed planning phase, is played in the window of 5 January 2002 through 20 April 2002. JLASS-II, the execution phase, is

played in the window of 21–29 April 2002. Scheduling of instructional periods in the third quarter will be on an ad hoc basis to align with the other SSSs. JLASS-I consists of 30 contact hours over 15 instructional periods. JLASS-II involves 30 hours during the six-day exercise. Enrollment in this course is through Seminar Director or Service Chairs only. To get the maximum benefit from this course, the student should enroll in the Air Campaign elective and the JFACC elective.

## EL 6524 Space Fundamentals (Classified, US Personnel)

**DFW** 

The course focuses on the elements of space power, military applications of space systems, distribution of space-based information, and availability of commercial systems. It is primarily oriented toward current systems and those that will be available in the next few years. This course is intended for US students with little or no space background. Background information on space characteristics, limits imposed on use of space, and space organizations, missions, and functions will be provided in readings and in the first few lessons. The remaining lessons will focus on specific types of space systems and how they contribute to war fighting. Each lesson comprises a briefing and a discussion, with guest speakers supplementing the faculty. Students lacking a practical background in space operations should take this course before attempting the Term 2 "Space Issues" elective.

## EL 6525 Space Issues (Classified, US Personnel)

**DFW** 

This elective will explore topical and timely concerns that affect the US military, commercial, civil, and national space systems. Strictly limited to 16 students, the course will use a seminar format to discuss a broad range of issues, including doctrine, laws and treaties, planetary defense, technology transfer, and national missile defense. Subject matter experts from outside agencies will be used to enhance the lessons. Previous experience in space and missiles or successful completion of the "Space Fundamentals" elective is a prerequisite. Student-led discussions, presentations, and class participation will comprise the grade.

## EL 6529 Special Operations—Then & Now (Classified, US Personnel)

**DFW** 

This course provides an understanding of the organization, capabilities, and missions of US Special Operations Forces (SOF) with particular focus on their support to the regional CINCs. It will provide an awareness of the roles of the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict and the

Joint Staff J-3 Special Operations Division (J-3 SOD). The course analyzes the integration of joint SOF capabilities with conventional forces and takes a brief look at SOF equipment, training, and support. Considerations for mission employment and insights into civil affairs and psychological operations will also be covered.

## EL 6530 USAF Chemical & Biological Warfare Issues (Classified, US Personnel)

This course examines emerging chemical and biological warfare challenges to the US domestic homeland, USAF, and US allies. The course, taught by the deputy director of the AF Counterproliferation Center (CPC), will examine the types of chemical and biological agents as well as the weapons under development and being deployed by potential adversary states. The course examines different strategic, operational, and tactical uses for these weapons. It will look at the chemical and biological warfare (CBW) threats in various regions of the world such as in the Middle East, Persian Gulf, North Africa, and Northeast Asia, as well as potential chemical-biological terrorist threats. The USAF and DOD counterproliferation efforts will be viewed and discussed in light of this emerging threat. Responsibility of the military and the roles of other federal agencies in homeland defense will be examined. Solutions such as counter-force, active defense, and deterrence will be examined. The course will feature two rigorous field studies, utilize several outside expert speakers, and require participants to have a current top-secret clearance.

## EL 6538 NBC Threats & Counter Proliferation Issues (Classified, US Personnel)

This course examines the various nuclear, biological, chemical, and missile (NBC/M) threats to the United States and its allies, as well as the counterproliferation (CP) policies and programs established to prevent or cope with those threats. Taught by the director and associate director of the USAF Counterproliferation Center, this course examines NBC/M capabilities of such states as Iraq, North Korea, Iran, Libya, China, and Russia. It also takes a hard look at the adequacy of policies and programs to prevent, slow down, roll back, or defeat adversaries with NBC/M-armed forces. The course covers a plethora of CP issues, including nonproliferation treaties, verification programs, demilitarization efforts, export controls, deterrence, US grand and theater strategies in a CBW environment, unconventional threats, counterforce issues, active defenses, passive defenses, and decontamination. Open to US citizens only, the course features work with classified information. Field trips to important CP sites, renowned guest speakers, and specialized CP databases/research tools highlight the course.

## EL 6544 Counterforce Attack Issues: Negating the NBC Threat (Classified, US Personnel)

DFW

This course looks at the counterforce attack issues involving the United States and its allies when confronting adversaries with weapons of mass destruction (WMD) programs. The course will cover current NBC threats, principles of targeting and the target cycle, legal-ethical-political limits in targeting, deeply buried hardened targets, the Scud hunt and mobile TELs, newly emerging agent defeat weapons and earth penetrators, nuclear arms in counterforce targeting, CF tools available to compute outcomes and assess bomb damage, fused intelligence on WMD assets available through the Counterproliferation Analysis and Planning System (CAPS), the pros and cons of preemption in possible future scenarios, and discussion of past counterforce operations (in World War II, several Middle East wars, and Desert Storm). This course is restricted to US citizens with a security clearance. Numerous outstanding speakers from the defense community will be involved. The student will be challenged to think critically and strategically in weighing the application of CF technology in a world where major collateral damage from CF weapons is considered unacceptable and where enemy WMDs pose a horrific threat. Balancing the need to avoid unnecessary civilian casualties while forcibly disarming an NBC-armed enemy is the challenge of the strategic leader.

## **EL 6547 Focused Logistic Wargame 2001**

DFW

Enrollment in this course is by instructor permission. This elective is a rare opportunity. Played only every other year, this J-4 led exercise is already in use at the service-GO level and culminates during the week of 20–26 October here at Maxwell with 350 participants, including 50–55 GO/FO/SES. The Focused Logistics Wargame is an assessment tool that uses guidance provided from National Military Strategy, service documents, and selected warfighting scenarios to evaluate the capability of joint logistics forces to support the war fighter in 2010. Appropriate for both Loggies and non-Loggies, this is an opportunity to watch, interview, and listen to participants as they analyze real-world logistics issues in a war-game forum.

#### **AY02 Core Red Elective Courses**

Course Dept.

EL 6122 Directed Study I

DFB

EL 6124 Directed Study II EL 6126 Directed Study III

Students interested in intensive work on a particular topic can develop, with a faculty member, a research agenda designed to give them an in-depth understanding of the subject. In order to enroll in this course, a student should develop, with an instructor, a research proposal and a reading list. Enrollment is limited and requires the approval of the associate dean for Research and Electives.

#### **EL 6211 Command and Conscience**

DFL

The late S. L. A. Marshall contended that "respect for the reign of law, as that term is understood in the U.S., is expected to follow the flag wherever it goes." The main safeguard against lawlessness and hooliganism in any armed body is the integrity of its officers. In a prudent and practical manner, this course will examine a variety of topics of immediate professional concern to the commander. How does today's leader resolve the tension inherent in the occasional clash of command responsibility and ethical imperative? To whom or to what does the leader owe the highest loyalty—to his superior? to the Constitution? to his religious/philosophical judgments? Which has priority—mission or men? If integrity is—as it must be—the heart of the officer corps, it must first be examined before it can be assimilated. This course, then, inquires into the nature of military integrity.

#### EL 6212 Core Values

DFL

An examination of these fundamental values that have, over the centuries, been the answers to these questions: What is the best way to live? And, what is the best way to lead? The course will survey the permanent things or enduring concepts of righteousness, classical notions of virtue, and eminent ideas of value—to include emphasis on USAF concepts of integrity, service before self, and excellence in all we do. Particular attention will be paid to ethical dilemmas and clashes of ideas about what is good.

#### **EL 6213 Critical and Creative Thinking**

DFL

Two of the most important strategic leader competencies are creative thinking and critical thinking. Both these skills are essential and each has a unique place in decision making. Critical thinking will help the strategic leader analyze and deal with the complexity of strategic issues. Creative thinking allows the strategic leader to devise new solutions to problems or create breakthrough ideas. This course will explore each of these concepts in depth, helping the students become better critical and creative thinkers. The course will include extensive reading and case studies in creativity and critical thinking. Additionally, there will be practical exercises and guest speakers.

## **EL 6215 Leadership Case Studies**

DFL

Students will examine actual leadership situations that have confronted senior leaders in today's military. Taken from real life, the case studies review ethical, legal, managerial, organizational, and general leadership dilemmas that may challenge the modern military leader. The course is intended to help prepare students to command large organizations and to address the types of problems they may encounter as senior officers on a joint or service staff. Reading will consist of case studies and appropriate background material. There is no examination, but each student will be required to prepare a one-page introspective paper and a comprehensive case study appropriate for discussion in class. Grading will be based on class participation, written assignments, and leading an in-class discussion of the prepared case study.

## EL 6216 Leadership in the 21st Century

DFL

What is different about the future that leaders must prepare for? This course examines a wide variety of topics to help leaders develop the skills they need to succeed in the future. Lessons cover demographics of followers, trends in society, technology, innovation, leadership practices in industry, public affairs, leading change, and future organizations. Students will meet face-to-face with leaders now serving at the group, wing, and general officer levels.

## EL 6217 Leadership in World War I

DFL

Few conflicts offer as much apparent leadership failure as does World War I. To analyze this failure from the biographies and autobiographies of the participants is most useful to the current senior leader. Because much rich material is available, we have limited our study to the most relevant pieces of work.

### **EL 6222 Psychology of Decision Making**

DFL

How do people make decisions? What mistakes do decision makers often commit? What can I do to become a better decision maker? The purpose of this course is to explore how psychologists answer these questions and what they have to offer to the strategic

decision maker in the field of national security. The course will examine such questions as these. How should one deal with the overwhelming amount of information that inevitably confronts the strategic decision maker? How should the issue of risk taking be addressed? How can one learn from history? How can such factors as stress, organizational culture, and personality affect the quality of one's decision? What is the best way to manage decision-making groups? We will examine these questions by looking at specific cases of decision making in the realm of national security. Throughout the course our focus will be on how a psychological perspective may help us become better decision makers at the strategic level.

## EL 6223 Senior Leadership: A Historical Approach to USAF Commanders

DFL

This class introduces students to a representative sample of USAF leaders through military biography. Students will read small biographies of four, five, or six air-arm leaders from the 1920s to the 1960s. Applying different theories of leadership to each biography, students will discuss how and why different leaders were successful. A goal of this course is to help students examine their own leadership skills and how to best apply those skills in today's environment.

## **EL 6225 Issues in Military Professionalism**

DFS

This course examines the roots of the concept of the "professional soldier" and the relationship of "professionalism" to civil-military relations. The course begins by defining professionalism and examining the theoretical concepts that have shaped the military community's self-concept as professionals. It then probes the validity of these assumptions in light of subsequent developments in the literature of relevant historical and theoretical issues and relates these issues to the security situation of the period after the Cold War. Two sessions will examine the most important recent study of civilian control of the military. The course concludes with the ongoing debate on the relationship of the military to American society and a lecture by the instructor on a different view of military professionalism. The students will develop their own points of view on these fundamental questions on the final day of class.

## **EL 6227 War for Public Opinion**

DFL

This course treats public opinion as a strategic center of gravity. The historical case study approach is used to provide students a foundation of knowledge with which they may evaluate the

relationships between the military, the media, propaganda and national will. The course first examines public information and military-media relations from the Revolutionary War through World War I. Students then examine the public affairs period of the military-media relationship from World War II through today. In this block, students look at how modern journalistic practices and technology have created what many regard as a very fluid and volatile strategic center of gravity. Students then critically examine the public affairs doctrine, strategies, and tactics of today's US military. Students also explore the possibilities and complications of employing PA operations as a dimension of information operations. In doing so, they examine the potential utility of public information as a vital weapon in effects-based operations.

#### EL 6412 Air War in the Pacific

**DFS** 

This course covers the development of the air war within the framework of the joint war fighting effort across the vast expanse of the Pacific Ocean Areas. It begins with Japan's full-scale war of aggression in China in 1937 and continues through the attack on Pearl Harbor to the Trans-Pacific War. The focus of the course will be on the relationship between strategy and airpower in a series of joint theaters of war—the South Pacific, the Southwest Pacific, the Central Pacific, and the North Pacific—with some examination of the China and India-Burma theaters in the war against the Japanese Empire. We will examine the joint command structures, the relationship between carrier and naval land-based air assets and the Army Air Forces' role in this war, and the Japanese side of war to the extent possible. There is a requirement for the student to look at original records in the AFHRA.

#### **EL 6417 American Civil War**

**DFW** 

Using the experience of the American Civil War, the course will analyze the dynamic and synergistic interrelationship between the definition of national objectives and the formulation and implementation of grand strategy, national military strategy, and theater operations. The course highlights the factors that contribute to an understanding of the causes of wars; the dynamics of crisis periods immediately preceding the outbreak of military hostilities; the dynamics of the process of escalation of the national objectives as well as the level, scope, and intensity of violence from limited conflict toward total war; and the factors and processes explaining war termination.

#### **EL 6418 Coalition Warfare**

DFS/DFL

This course examines the history of coalitions and the evolution of coalition warfare during the past three centuries. The course starts

with an overview of the importance of coalitions in modern warfare and proceeds to scrutinize several specific coalitions from different eras. These include the Triple Alliance of 1756 (formed to defeat Frederick the Great's Prussia), the numerous coalitions created between 1796 and 1815 to fight Napoléon's France, the Allied and Central Powers' coalitions of the First World War, the Axis Powers' coalition of the Second World War, and the American-led coalition during Operations Desert Shield/Desert Storm. The course concludes with a discussion of effective coalition building for the security of the United States in the twenty-first century.

### EL 6423 Leadership in the Napoleonic Era

DFS/DFL

This course examines the careers of several commanders from the Napoleonic Era from 1796 to 1815. Special attention is given to the background, education, and other influences that molded each leader into the general or admiral that we will study. To give a wide range of experiences, leaders from several different countries are discussed. The course also includes a detailed study of each military leader in a crucial battle that demonstrates the vital skills that leader did or did not possess. The last class is a discussion of the characteristics necessary to be an effective military leader.

## EL 6424 Billy Mitchell's Air War: Practice, Promise, and Controversy in Military Aviation

DFS

This course is designed to broaden the student's understanding of the relationship among airmen, technology, and airmindedness in early military aviation. "Billy Mitchell's Air War" will also pay particular attention to the formative influence of the Great War in the air on the development of airpower thought in the 1920s. As a result, the course will use aviator memoirs and public writings to examine this period.

#### EL 6426 Causes of War

**DFS** 

Why do countries wage wars? Does the end of the Cold War end the major power wars? If not, is a major war between China and the United States possible? Why? The purpose of this course is to help you gain a systematic understanding of the causes of war so that you can address these issues in a more informed way. This is an important part of preparing senior officers for higher responsibilities at the strategic level.

#### **EL 6427 Collapse of Yugoslavia**

**DFS** 

This course will utilize readings, lectures, videos, and a movie to investigate the failure and disintegration of the Federal Republic of Yugoslavia from 1989 to 1999. Among the topics covered will be

the historical background of Yugoslavia, the wars in Slovenia, Croatia, and Bosnia, and the Kosovo problem. Students will be expected to write a short paper, present it to the class, and take a final examination over the materials presented in class.

## EL 6428 Intelligence (Classified, US Personnel)

**DFS** 

Intelligence—accurate and timely information about unfolding world events and international concerns or threats—is crucial to the successful conduct of US foreign policy. In the post–Cold War period, the United States may exercise even greater influence in international affairs than it did previously. Yet the dynamics of international relations are more complex and the perception of threats to US interests may be less obvious. While US policy makers will continue to rely on intelligence to make judgments and decisions, the role of intelligence—with its need for secrecy and occasionally extra-legal activities—presents many dilemmas for a democratic society.

## **EL 6431 Inter-American Security Issues**

**DFS** 

This course focuses upon the post–Cold War security environment in the Americas and will explore the security challenges with which regional authorities are now grappling. Regional and subregional concerns and perspectives will be addressed. Specific issues to be examined include regional and subregional security architecture and proposals for change, narco-terrorism and narco-trafficking, insurgency, border tensions, crime, combined operations, confidence-building measures, peacekeeping, methods of conflict resolution, and mil-to-mil relations.

#### **EL 6432 Politics of NATO**

DFS

As the Cold War ended, the demise of NATO was predicted by many analysts and policy makers. The argument was that NATO's cold-war mission of thwarting the Soviet military threat had been accomplished. Just as the Warsaw Pact dissolved, so too would the trans-Atlantic alliance. In the face of such gloomy forecasts, NATO survived. In fact, it thrived. By the end of the 1990s, new members had been added and the alliance set about to rewrite its mission in Europe—a mission tested and, most would argue, proven successful in Kosovo. That success noted, however, NATO faces new challenges—many of them political. What is NATO? Why does it persist? What and who drives it? Can it meet the increasing load of challenges it faces while maintaining internal cohesion? These are some of the questions and issues we will address in this elective. If you think you may be assigned to NATO in the future or to a job where you will work with NATO, you should strongly consider taking this course.

#### **EL 6433 Russia and the Soviet Successor States**

DFS

This course examines the political, economic, and security challenges facing Russia and the other 14 successor states to the Soviet Union as well as the implications of those challenges for the United States and international security. To assess American policy options toward them into the next century, the course will seek to evaluate the progress, possibility, and desirability of democratization, market reform, military reform, and international reorientation in these states. Special attention will be devoted to the themes of continuity and change in policy under the Bush II administration in the United States and the Putin administration in Russia.

## EL 6436 International Organizations & Peacekeeping Operations

**DFS** 

NATO, spearheaded by the USAF, stopped Serbian forces from ethnically cleansing 1.8 million Kosovo Albanians. Could international organizations (IO), such as NATO or the UN, have stopped the genocidal killing of 800,000 Rwandans in 1994? In this course, you will examine the role of IOs, particularly as guarantors of peace and security, and come to understand what they can and cannot do. US armed forces have acted often within the framework of IOs (within NATO in Kosovo and Bosnia and the United Nations in Macedonia and Haiti), or with the endorsement of IOs (the UN in Operation Desert Storm). Thus, a strategic military thinker must be cognizant of IOs and their functions. The course starts with the UN and recent cases of peacekeeping. It moves to regional organizations, including NATO and the European Union. Finally, we deal with international nongovernmental organizations (NGO) and their role in the prevention and resolution of conflict and relations with military peacekeepers.

## EL 6437 Sun Tzu: Unconventional Strategic Thought DFS

This seminar will examine strategic thinking primarily through the examination of several major works of classical Chinese strategy known collectively as "The Seven Military Classics of Ancient China." Special attention will be given to the one of these works best known in the West, Sun Tzu's *Art of War*. We are neither experts on China nor should we expect to become experts on traditional Chinese strategic thought through one elective. The purpose of the seminar is to examine an approach to strategic thinking primarily through reading and discussing classical Chinese writings that is unfamiliar, difficult, and—ultimately, evocative of new, creative, and distinctive strategic thinking.

#### EL 6441 War and Peace in the Balkans, 1800-2000

DFS

This course will examine the major diplomatic and military events affecting the Balkan Peninsula from the beginning of the nineteenth century up until the present day. The roles of Albania, Bulgaria, Greece, Romania, and the areas included in Yugoslavia will be scrutinized in the context of their interactions with each other and the leading countries of the world. Among the topics covered will be the role of the great powers in the Balkans in the nineteenth century, the Balkan Wars, the First and Second World Wars, the Cold War, and the wars of Yugoslav revolution.

## EL 6447 Strategy and Technology EL 6448 Strategy and Technology II

**DFS** 

Enrollment in this course is by instructor permission. This is a two-term seminar with the first part focusing broadly on readings and discussions of strategy, technology, and national policy. The second term consisting more of a research seminar refining individual research presentations. Designed to support research and publication on strategy, technology, and national policy, this seminar is supported by the Center for Strategy and Technology (CSAT) at AWC. The intent of this seminar is to fit between strategy and technology in national policy decisions.

In Term I, we will employ a variety of methodologies in generally investigating strategy and technology: guest lecturers, field trips, individual study, research, and seminar discussions, all of which are designed to generate topics for further study; and we will refine these into outlines for writing. The deliverables for Term I are a research proposal to include a problem statement, research design, bibliography, and a draft paper/outline. Individual TDYs may be arranged as a part of your research. Term II will be devoted to research, writing, and defense of the student papers. Some of these will be selected for publication by CSAT; some will be published in other venues.

## EL 6452 Surprise and Deception in Modern War

DFS

This course examines the nature of surprise and deception and their impact on modern war. The objective is to understand the significance and limitations of surprise and deception. Instructional periods will address theory and specific cases where surprise and deception may or may not have had a decisive impact on the outcome of campaigns or wars. The work consists of readings, class discussions, student research/writing, and a student commentary on the paper of another student. Each student will write a five to 10 page paper on the issues stated or implied in the course title. The paper may be on a campaign, a peacetime issue,

or upon a theoretical topic relating to technology, doctrine, or developing concepts. The course will include an examination of current deception doctrine.

### **EL 6453 Technology and the History of Warfare**

DFS

Since technological breakthroughs affect war fighting in both operational and doctrinal ways, understanding and coping with those effects is a daunting task and has often confounded warriors. This course examines, in an analytic framework, two approaches that have emerged from the study of these effects. Ultimately, the course depends upon four great leaders in historical synthesis to adequately study the two approaches described above. It was Michael Howard who described war as mass, firepower, and surprise (he used "shock") and insisted we look at which of those three was most affected by technology. Later, Martin van Creveld described warfare as being composed of initiation, escalation, and termination, and argued that the effects of technology have to be analyzed in that light.

With those thoughts in mind, the course turns back to the two approaches that most would argue includes both Howard's and van Creveld's descriptions. The first approach, championed by I. B. Holley, argues that every technological change affects either offense or defense in a greater or lesser way. An analysis of those affects will lead to a viable synthesis. The second approach, trumpeted by Eugene Emme, argues that the multifaceted technology of the post-industrial age has befuddled the line between peace and war, thus making the tasks of peace keeping and war making so difficult to discern and to separate that analytical study is compromised and any synthesis is nearly impossible. This course will also explore the "nearly."

## **EL 6454 Technology in World War I**

DFS

World War I offers incredible examples as weapons changes and improvements overwhelmed military intellectual comprehension and, in turn, seriously retarded doctrinal acceptance. We rely on Jim Stokesbury for a complete history of World War I and then turn to Michael Howard and Martin van Creveld to invigorate our analyses into a viable synthesis. Howard described war as mass, firepower, and shock, and said we must determine which of those three was most affected by technology in World War I. Creveld described warfare as being composed of initiation, escalation, and termination, and said the effects of technology in World War I have to be analyzed in that light.

#### EL 6461 Vietnam War 1945-1975

DFS

The course addresses the causes, character, and consequences of the Vietnam War (1945–1975). It focuses on both the foreign policy context of US intervention in Vietnam and the conduct of US military and other operations during the war. The course is organized into three major sections: (1) an overview of the war and its associated issues; (2) an examination of the foundations of post–World War II US foreign policy—and domestic political considerations—that propelled the United States into the Vietnam War; and (3) an assessment of America's conduct of the war and the reasons for its defeat.

## EL 6473 Arming the Future: America's Defense Industry and the Arms Trade

**DFS** 

This elective is designed as a policy-level course to address a broad spectrum of defense industrial policy and conventional arms control issues stemming from the post–Cold War defense demobilization. The purpose of the course is to examine the interrelationships among national security strategy, defense industrial policy, and conventional arms proliferation and the resultant impact on regional stability and international security. The course will revolve around three core areas related to economics and security: defense industrial restructuring and globalization, including US domestic actors in the arms transfer process, dual-use technologies, and arms export policies; regional issues, with particular emphasis on the Middle East and East Asia; and special topics such as missile proliferation, light weapons, land-mine use, and the black-market trade.

#### EL 6474 Korean War

**DFS** 

The course assesses the Korean War at the grand strategic and strategic levels of analysis. The primary focus is on the major political and military decisions made by the Soviet Union, the United States, and China—most of which were miscalculations based on cultural incomprehension and failure to appreciate the others' strategic and domestic political imperatives. The Korean War is approached as a case study in (1) the inherent instability of war aims, (2) the inherent difficulties in crafting exit strategies, (3) the cultural barriers to strategic and operational effectiveness, (4) the inseparability of domestic politics and use-of-force decision making, and (5) the inherent tension between regional and global perspectives on strategy. The Korean War is also approached as a possible instruction on a future Sino-American war: Does the Korean War, which was largely a war between the United States

and China, tell us anything about how a future American war with China might come about and play out?

#### **EL 6510 Cultures of Violence**

DFW

This elective will address the issues relating to societies in which violence appears to be endemic. Using examples from such diverse environments as El Salvador, Jamaica, Yemen, East Africa, and West Africa, we will study how groups such as the cattle raiders of Karimojong and the "gangsta warriors" of Liberia and Sierra Leone turn into chronically violent entities. We will also analyze the impact that weaponization had upon these groups, with particular emphasis on how light weapons proliferation helped to encourage the creation of "Kalashnikov cultures."

## **EL 6516 History of Joint Warfare**

**DFW** 

The employment of joint warfare has been a challenge to US armed forces throughout the military history of this country. This course examines historical examples of joint operations in an effort to provide an understanding of the advantages and disadvantages of employing more than one service in a military operation. An evaluation of joint operations conducted throughout the military history of this country will be used as the method of inquiry.

## EL 6523 America's Army

**DFW** 

This course is specifically designed for non-Army students who want to gain greater understanding about the Army. The Army is thoroughly explored, with a strong emphasis on how history and heritage influence current force and doctrine. Students will gain a comprehensive awareness of Army culture and develop an appreciation for what the Army can provide to a regional CINC or joint task force commander. This course will build a solid foundation of knowledge about the Army, including the US Army's force structure and capabilities, doctrine, terminologies, and idiosyncrasies. Students will analyze and evaluate Army doctrine relative to their own service and the joint community. The goal is to ensure students understand what it looks, feels, and smells like to be a soldier. Class culminates with a three-day practical exercise (MAPEX) to validate course classroom instruction.

## EL 6528 Special Operations—Deep & Wide (Classified, US Personnel)

DFW

This course is a follow-on to the SOF basic elective course, Special Operations—Then and Now, which was taught during the first two terms of this academic year. It is primarily designed for, but not

limited to, those class members going to assignments within US Special Operations Command (USSOCOM) and its components or to other special operations-related assignments. The course will focus on emerging mission areas such as CP and information warfare (IW) as well as reviewing recent operations in which SOF have played key rolls.

#### **EL 6532 World Space Issues (IOs Only)**

DFS/DFW

As a result of Desert Storm, the importance of space force to the war fighters has grown significantly. To ensure the continued success of space forces, the United States must continue to educate our future leaders as well as those international officers who will lead the coalition forces in future conflicts. The main theme of this course will be to examine the basics of space operations: policies, law, and doctrine—and the capabilities and limitations of current space forces. Existing issues associated with the use of space forces will be identified throughout the course. Special interest topics include: Spacelift, Theater Missile Defense, and Space Control.

## EL 6533 International Rivals: Leaders & Strategic Cultures in Potential Adversary States (Classified, US Personnel)

**DFW** 

This course will look at the leaders and strategic cultures of countries and groups of concern to US national security. Addressed will be the political-psychological profiles of leaders of critical states and groups and the way they make decisions relating to national security matters. This course will examine the chiefs of Iran, Iraq, Libya, Syria, China, Russia, North Korea, and various terrorist or revolutionary organizations like the PKK, Islamic Jihad, Hezbollah, and Osama bin Laden's organization now headquartered in Afghanistan. Who are these leaders and what formed their world view? What values and ideas do they espouse and how can they be influenced? Who in their regime or group makes what kinds of national security decisions and why? How can they be deterred from war or escalation? What is their military doctrine and what are their military capabilities? How have they used force in the past and what is their relationship to other states in their region as well as to the United States and its allies? What are the internal power divisions within their country, group, or region? Who are their allies, who are their foes, and why? This course includes use of classified databases, guest speakers, films, and students' presentations.

## EL 6534 Intelligence Operations (Classified, US Personnel)

**DFW** 

JV 2020 calls for decision superiority—making and implementing better decisions faster than the adversary can react. Decision superiority is only achieved through the full integration of intelligence, surveillance, and reconnaissance (ISR) operations into the military campaign. For this to happen, commanders need to fully understand the ISR weapon system. This course teaches students everything they need to know about ISR for strategic and operational campaign planning and execution: the intelligence mission, organization, activities, and processes; how ISR operations are integrated into aerospace operations; the capabilities and limitations of the seven intelligence disciplines; and the challenges facing ISR war fighters as they gear up to meet the everincreasing information needs of military commanders, planners, and operators.

## EL 6535 WMD Issues: Research and Analysis

**DFW** 

Enrollment in this course is by instructor permission. After a brief introductory tour of the counterproliferation world, led by the instructor, this course will focus on AWC student research projects dealing with important WMD issues chosen jointly by the student and instructor. Topics selected must be of high interest to the USAF and defense community. This may be a subject relating to understanding either (1) a particular nuclear, biological, or chemical warfare threat; (2) the leadership or strategic culture of an adversary state or group possessing or seeking to possess such WMD; or (3) US and allied means of coping with such threats through diplomacy, arms control, deterrence, active defense, defense. counterforce targeting, passive or consequence management. Research TDYs will be funded on a case-by-case basis by the USAF CPC. Research papers will be published if deemed sufficiently well researched and written.

#### EL 6536 International Crime and National Security

DFW

The National Security Strategy states that transnational threats, such as the illegal drug trade, illicit arms trafficking, and international organized crime, threaten American interests and citizens, both directly and indirectly. The Air Force Strategic Plan argues that weakened societies and global interdependence provide fertile ground for expanding international criminal activities. Advanced light weapons and information technologies provide new tools to augment the threats and extend the reach of criminal groups. Criminal activities affect the international security environment through their baneful impact on societies, economic

distortions with global repercussions, and increasing potential to destabilize countries.

### EL 6537 Navy and Marine Corps Expeditionary Forces DFW

This course is designed to provide students a comprehensive introduction into Naval Expeditionary Warfare. It will cover current Navy and Marine Corps strategy and doctrine, emphasizing Navy/Marine Corps force planning, forces and capabilities, and military operations. Students will be given comprehensive briefings on US Navy and Marine Corps operations in support of joint strategy, will participate in panel discussions and case studies, and will travel on field trips for hands-on reinforcement of lessons.

#### EL 6540 Ottoman Strategy and Modern Turkey DFW

Following a brief survey of the foundation of the Ottoman state, the course will look at the Ottoman grand strategy and the use of military force in trying to solve strategic problems. This course will then examine the transition of the Ottoman state into the modern Turkish Republic and finish with a comparison of the role Turkey plays today in managing regional strategic challenges. The readings and discussions are aimed at two objectives: (1) to understand strategic thinking from an Ottoman perspective as it relates to a critical geopolitical nexus and (2) to examine the current part Turkey plays at the crossroads of the Balkans, Caucasus, and Middle East. This course provides a strong introduction to any of the Regional Studies trips going to these areas but does not duplicate those in other courses.

### EL 6542 Terrorism DFW

Terrorism is one of the oldest of military tactics and forms of warfare, historical evidence dating it at least to 5000 BC. The root word for terrorism appears in ancient Greek, Roman, and Sanskrit languages. In more modern times, however, terrorism has become the most frequent form of conflict. In only 30 years, for example, recall the carnage at the 1972 Munich Olympics; the 1983 Beirut truck bomb attack that killed 241 Americans; the 1988 bombing of Pan Am Flight 103 that killed 259 passengers; the 1993 New York World Trade Center bombing that had 1,000 casualties; the 1995 attack on the federal building in Oklahoma City that killed 168 people; the 1996 Saudi Khobar Towers that took the lives of 19 US airmen; the use of chemical weapons in a Tokyo subway that resulted in 12 deaths and 5,500 injured; the 1998 bombing of two US embassies in East Africa, which killed 214 people; the 2000 attack on the USS Cole which killed 17 US sailors; the September 2001 attacks on the World Trade Center and the Pentagon, which killed more than 5,000; and the subsequent Anthrax attacks via

the US postal system. This course will examine why terrorism has reerupted; the implications for political, economic, military, cultural, and religious institutions; the increasing lethality of terrorist acts; and the prospects for resort to nuclear, biological, radiological, and chemical weapons. Capabilities and limitations of governmental authorities will be addressed and also what the future may hold for deterring and countering terrorism.

#### **EL 6543 Theaters of Future Conflict**

**DFW** 

This unique elective wholeheartedly embraces the process of "thinking outside the box." Throughout the course, students explore the creation, development, and writing of future war scenarios in order to better analyze twenty-first century warfare. Once developed and written, future war scenarios enable military and civilian leaders, planners, analysts, and tacticians the opportunity to examine a broad variety of "what ifs" in future war concepts, strategies, doctrines, tactics, and technologies. Because AF and other DOD combat planners describe elements of scenario development in terms of actors, theaters of conflict, and the classic beginning, middle, and end, this innovative course examines scenario creation, development and writing from a professional screenwriter's point of view.

## EL 6545 From Saigon to Ho Chi Minh City: The Second Indochina War

DFW

This course will survey the Second Indochina War, with a specific emphasis on America's involvement. The review will include US activities in Laos and Cambodia, the so-called secret and shadow conflicts. While a 15-IP course can only begin to trace the outlines of America's Southeast Asian war, we will endeavor to answer some basic and important questions. How did the United States become involved? What were the initial objectives and how and why did these objectives change? Who were some of the major personalities and how did they affect the conduct of the war? What were some of the primary strategies and major battles/engagements? Why and how did the United States extricate itself from the war? What is/should be the US-Vietnam relationship? What are some of the principal lessons/consequences of the war? How does the Indochina War affect today's US decision makers and war fighters?

#### **EL 6546 Future Total Force Issues**

**DFW** 

From the initial vantage point of a historical review of the ANG and AFRes, students will engage the compelling issues affecting the Total Force today and beyond 2000. This is not a course on the rudiments of the Air Reserve components; rather it is a forum for

debating strategic issues facing aerospace leaders as the twenty-first century closes in on the Total Forces. Some suggest that we will transition to a militia nation once again. Do you agree? Just exactly what is the right force mix for the active and reserve components? The course will include a sprinkling of outside speakers, two field visits, video teleconferences, with the top leaders of the Air Reserve components, and more. Strategic leaders of tomorrow will influence the makeup of the Total Forces of the next millennium. The course will give you the opportunity to establish multidimensional views on the issues at hand and pave the way for you to influence the Total Force beyond 2000.

## EL 6549 Air Force Modeling and Simulation Today DFW

Numerous trends are shaping the future environment in which Air Force Modeling and Simulation (AFM&S) will serve the war fighter. The national security environment in which the US military operates is increasing in complexity. M&S allows war fighters and decision makers to reduce the risk and associated uncertainty caused by these future realities. With today's technologies, it is possible to "map" future theaters of war and conflict scenarios onto an accurate, predictive synthetic environment where options are tested, accurate decisions supported, alternatives examined, and mistakes are not deadly. This course will provide the student with the opportunity to understand AFM&S terms and concepts, how the Air Force is organized to provide M&S support to the war fighter, M&S applications, and issues/challenges facing AFM&S leaders.

#### **AY02 Core White Elective Courses**

Course Dept.

#### EL 1111 Research and Writing Methodology

DFB

This course is intended to familiarize the student with the methodology for conducting research and for presenting the results of the research in a formal written document. The student will learn techniques for selecting a research topic, discover resources appropriate to the topic, prepare a bibliography and an outline, take notes, and write the paper. These actions will be taken in consultation with the professor. Each step will be largely completed before the next is undertaken.

### **EL 1213 Executive Speaking**

DFL

This elective will be limited to 10 participants who want to become better speakers. It will focus on strategies, techniques, and hints professionals use to speak effectively. Emphasis will be given to (1) building the speech; (2) weaving stories, illustrations, and humor throughout the speech; and (3) both presenting the speech and handling questions from the audience. For the final assignment, the instructor will schedule each participant to present a speech to a local civic club (Rotary, Kiwanis, Lions, etc.). The instructor will accompany the participant to the speaking engagement.

#### **EL 1225 Commander and the Law**

**DFB** 

Today's AF commanders and senior supervisors face a plethora of problems in trying to ensure mission success. These include such difficulties as finding money for operational matters, selecting the right quality force management tools to maintain discipline and morale, ensuring that installation operations comply with environmental restrictions, and applying international rules—during peace and war, on land, sea, air, and in space. In order to solve these dilemmas, commanders must be aware of the galaxy of laws, regulations, criminal procedures, and administrative rules that deal with substantive matters, as well as any limitations on the exercise of their command and supervisory authority. This course provides a broad overview of the major legal areas commanders should be aware of and addresses a variety of specific issues in military criminal law, civil law, and international operations law. While this course will cover the entire spectrum of military legal practice, it will principally focus on legal issues that arise at the group and wing commander level.

#### EL 1226 Commander and the Media

DFL

Because the mass media continues to have an ever-increasing influence in American society, you, as a senior military or civilian government leader, must have a grasp of today's news business and the interview process. The underlying premise of this course is that DOD stands to benefit from effective communication with its many audiences via the news media. We have two principal goals to achieve: (1) to assist you in better understanding the sometimes difficult relationship between the military and the news media and (2) to develop specific tools and techniques to effectively engage the news media. You will work towards becoming a more effective spokesperson for your organization. We will strive to better understand today's news business and break down some of the mystique that often surrounds the news media. At AU Television you will learn a variety of practical methods to control interview

situations and get your messages across to the public. Guest media representatives and visits to media outlets, to include CNN in Atlanta, are included in this course.

## EL 1462 Visual Media: Propaganda & Strategic Image

**DFS** 

This course will provide the students an overview of military image trends in American cinema and television, from the early twentieth century to the present. Through lecture, class discussion, readings, guest speakers, and review of key twentieth-century motion picture and television productions, students will acquire a keen understanding of how image perceptions and realities influence public opinion, both for and against the military. Additionally, students will learn how changes in political and social climates are reflected—or not reflected—by cinema and television and how those same reflections can foster changes in how the American military conducts itself. Finally, they will understand how cinema and television help shape the public image of the US military and influence the evolution of military strategy and doctrine.

## EL 1710 English as a Second Language

IOS

This course is for selected international officers only. It provides intensive work in the English language.

## **Additional Core Courses and Programs**

## **6600 Regional Studies**

**5 semester hours** 

Future AF leaders must truly understand and embrace the concepts and implications of engagement and presence articulated in our current vision statement, Global Engagement: Strategy for the 21st Century. The Expeditionary Aerospace Force is a proactive move away from the cold-war USAF. To meet the challenges of the Expeditionary Aerospace Force, the Regional Studies Course provides each US student the opportunity to evaluate an area of the world where a regional commander in chief must implement the national military strategy in support of US security policy. Understanding this implementation process requires an appreciation of the complex international environment in which it takes place and familiarity with the nations affected by US policies. The Regional Studies Course provides the opportunity for US students to gain unique perspectives by studying and visiting one of 14 regions of the world. During the third term, each student completes 30 classroom hours of focused academic preparation and begins work on a research paper dealing with security in the region. The research paper is completed following a 12-day field study trip to the region. The field study portion allows

students to discuss security policy issues with senior political, military, and academic leaders in other nations. Logistic and administrative preparation and travel planning for the field study seminars is accomplished throughout the academic year. A post-trip seminar provides a cross talk and the opportunity to wrap up the course. At the end of the course, students prepare a detailed analytical trip report and continuity book.

### **IO 6650 International Officer Field Studies** 5 semester hours

This course is structured to enhance the educational and cultural experience of IOs, and to support Department of Defense Informational Program (DODIP) objectives for international military students by assisting AWC international officers in gaining a balanced understanding of US society, institutions, and goals. The course builds on the AWC curriculum by exposing IOs to US military operations, training, organization, equipment, and facilities during six major field studies trips. Trip duration is typically four to 12 days. The Field Studies Program introduces IOs to leadership and management techniques and concepts used in military, government, and industrial environments and provides the opportunity for IOs to interact with senior-level commanders, managers, and executives within and outside the government.

### **AWC Resident Curriculum Summary**

	Contact	<u> </u>	Academic	
	Hours		Credit	
		Credited for	Semester	
Course	Total	Masters	Hours	
Orientation	10	0	0	
Executive Wellness	10	0	0	
Leadership and Ethics	58	58	4	
International Security Studies	61	61	4	
Strategy, Doctrine, and Airpower	73	73	5	
War Fighting	146	146	9	
Regional Studies Program				
(Academics and Field Study)	120	90	5	
Core Electives Program*	120	90-120	6-8	
Wargame	40	0	0	
National Security Forum (NSF)	22	0	0	
Distinguished Lecture Program	38	0	0	
TOTAL	698	518-548	33-35	

<sup>\*3</sup> of 4 electives from designated list of accredited electives

## **National Security Forum**

The National Security Forum (NSF) is an event sponsored by the Secretary of the Air Force and hosted by AWC during the week before graduation. It is the capstone event of AWC's academic year. NSF brings together approximately 100 civilian leaders with diverse backgrounds from locations around the United States to join with the AWC class.

The primary objective of the NSF is a frank and candid exchange of views on national security matters among our invited guests, AWC students, and senior military and civilian leaders. The week is devoted to exploring the many issues that affect the current and future security of our country, focusing heavily on the role of aerospace power as an instrument of national security. The forum's distinguished speakers, seminars, and social functions serve to broaden and solidify the participants' understanding of aerospace power and national security issues.

## **Distinguished Lecture Program**

The commandant and dean of Academics approve approximately 30 distinguished speakers who will address the class throughout the academic year. They lecture on contemporary national security issues and then may participate in a focus group composed of 18–20 students immediately following their presentations. The speakers integrate leadership themes or topics and issues with which senior leaders should be familiar. Student preparation is limited to critical listening, questioning the speaker, and active participation in the focus group that follows. The Department of Leadership and Ethics administers this program.

## **Spouses Program**

The AWC Spouses Program is an inclusive term for numerous activities that provide opportunities for spouse participation throughout the resident program academic year. To the greatest extent possible, spouses are included in the academic program at AWC, other programs at AU, and programs provided through the base chapel and the Family Support Center.

Opportunities to participate in the AWC academic program include orientation, academic lectures, and core elective studies (on a space-available basis). Also, a special health and fitness assessment program is offered for spouses—spouses can participate along with the class members to obtain a psychological and physiological health assessment. The goal of the program is to increase personal awareness, provide

motivation to make necessary changes in personal lifestyle, and enhance quality of life. Numerous presentations on a wide variety of topics are offered through the base chaplain's office and at the Family Support Center. AWC spouses are invited and encouraged to attend.

### **Nonresident Programs**

AWC Nonresident Studies consists of seminar and correspondence programs. The mission, objectives, and philosophy of the AWC resident program apply to the nonresident program.

Nonresident studies provide senior professional military education to eligible officers and civilians who are unable to attend AWC in residence. The nonresident programs incorporate the essential elements of the resident program, addressing doctrine and strategy, national security affairs, leadership and ethics, regional issues, joint forces employment, and possible future conflicts.

#### **Seminar Program**

The Seminar Program consists of groups of eight to 20 students, who can exchange information and opinions related to each lesson. In addition to meeting attendance requirements, students must pass an examination after each of the six courses and submit a 15-page paper on one of approximately 140 topics.

The Seminar Program begins in August and continues through June of the following year. About 1,000 students are enrolled in the Seminar Program at nearly 60 locations worldwide.

## **Correspondence Program**

The Correspondence Program is convenient for those not near a seminar location or whose schedule makes attending AWC seminars difficult. Approximately 75 percent of AWC nonresident students complete the program by this method. Correspondence students have up to six months to complete each of three terms, and up to 18 months to complete the entire program. Correspondence Program examination and writing requirements, as well as course materials, are identical to the Seminar Program.

For enrollment information, contact your base education services officer, or visit our Web site at http://www.au.af.mil/au/awc/awc-ns.htm. Inquiries may be addressed to AWC Nonresident Studies Directorate, 325

Air University Catalog, 2001–2002

Chennault Circle, Maxwell AFB, AL 36112-6427; (334) 953-6093 (commercial) or DSN 493-6093.

## **OFFICER ACCESSIONS**

Air University's Officer Accession and Training Schools provide centralized leadership and coordinate policies and curriculum for two of the Air Force's three commissioning programs. The third program is the United States Air Force Academy—a direct reporting unit under the chief of staff of the Air Force.

## AIR FORCE OFFICER ACCESSION AND TRAINING SCHOOLS

Brig Gen Paul M. Hankins, Commander

Internet Address
http://www.afoats.af.mil

**Mission:** Produce leaders for the Air Force and build better citizens for America.

In 1995 the Air University Board of Visitors—an advisory board to the AU commander consisting of educators, business leaders, and retired AF generals—recommended that AU bring together officer accession sources to streamline the organizational structure and reduce the commander's span of control. The Air Force Officer Accession and Training Schools (AFOATS) was activated on 14 February 1997, merging the Officer Training School (OTS) and the Air Force Reserve Officer Training Corps (AFROTC). Consisting of the two line organizations, AFOATS is the commissioning source for more than 80 percent of the Air Force's line officers and provides initial officership training to over 95 percent of its nonline force.

AFOATS furnishes coordinated leadership and policy direction for the AF's officer recruiting, training, and commissioning programs at OTS and at AF ROTC detachments at 143 host universities. Its staff manages support and develops curriculum to train tomorrow's AF officers. The merger of AF ROTC and OTS provides

- ? a single focal point for AETC's officer accessions,
- ? centralized support and curriculum areas,
- ? one organization to commission and train over 80 percent of AF officers, and
- ? a method to smooth the production flow for both AFROTC and OTS.

AFOATS senior leadership has identified five keys that are essential to the future success of the Air Force: recruiting, educating, training, and commissioning world-class AF officers; educating better and more productive citizens for America; providing quality support; developing a personnel life cycle for its officer accessioning programs; and continuing to improve the quality of life for its officer candidates. AFOATS also directs the AF's high school citizenship training program, AF Junior ROTC (JROTC).

# **Air Force Reserve Officer Training Corps**

Col Stefan Eisen Jr., Commander

Internet Address
http://www.afoats.af.mil/ROTC.htm

The Air Force Reserve Officer Training Corps is the Air Force's largest and oldest commissioning program. Initially based on the Morrill Act of 1862 and the National Defense Act of 1916, the ROTC program underwent a major change with the ROTC Vitalization Act of 1964. This act, which eliminated compulsory ROTC at state land-grant colleges and universities, offered two- and four-year scholarships with a focus on academics and leadership. The Vitalization Act established the Junior ROTC program and paved the way for today's AFROTC program. AFROTC currently operates at 143 colleges and universities and has over 900 cross-town agreements with other institutions. As of 31 October 2000, cadet enrollment was 13,351 college students. AF ROTC's scholarship program includes more than 6,500 cadets and a scholarship budget of \$48.5 million in fiscal year 2001.

## **Programs and Operations**

AF ROTC offers both two- and four-year programs. The four-year program is divided into two phases: the General Military Course (GMC), which encompasses the freshman and sophomore years, and the Professional Officer Course (POC), which covers the junior and senior years. During the summer between their sophomore and junior years, GMC cadets attend a four-week field training camp in a controlled environment to assess their potential as officers. Cadets not enrolled in ROTC as freshmen or sophomores attend a five-week summer field training camp. This five-week camp allows extra time for these cadets to gain the leadership skills GMC cadets acquire in leadership laboratories (LLAB) during the first two years of ROTC. Students entering the two-year ROTC program also complete entry-level classroom work during this summer camp.

AF ROTC continues to institute initiatives to improve its program, retain students, and conserve resources. With the critical need to promote diversity in military and civilian aviation, Air Force ROTC partnered with the Secretary of the Air Force's Office of Small and Disadvantaged Businesses to establish interest in and support for the

Flight Awareness Summer Training (FAST) program to inspire and retain minority students. This program provides cadets at historically black colleges and universities and minority institutions the opportunity to receive aviation ground school instruction and primary flight instruction during their summer break.

A second initiative is the foreign language immersion program. This four-week program is designed for junior and senior cadets with at least three years of foreign language studies. Cadets travel to the foreign country, live with local families, study at local universities, receive total language and cultural immersion, and commit to speaking only the language of study for the entire training period.

To retain cadets and provide flight experience, ROTC and the CAP instituted the CAP flight orientation program. This program puts ROTC cadets in CAP aircraft on regularly scheduled sorties, allowing CAP to make better use of its flying hours and giving ROTC cadets an opportunity to fly. In fiscal year 2000, nearly 2,000 ROTC cadets participated in the program, logging a total of more than 3,800 sorties. Future plans call for a similar level of activity.

#### Curriculum

The main curriculum areas are leadership studies, leadership applications, profession of arms, military studies, and communications skills. Teaching methods include informal lecture, guided discussion, case studies, readings, and field leadership activities (athletics, group leadership problems, and the leadership reaction course).

**Curriculum Summary** 

Instructional Area	Academic Hours
Leadership Studies	63
Communication Skills	37
Profession of Arms	37
Military Studies	76
Admin/Testing	27
LLAB	240
Field Training	286
TOTAL	766

# **Officer Training School**

Col Darrell L. Sims, Commander

Internet Address
http://ots.afoats.af.mil/

The Air Training Command activated the Officer Training School (OTS), at Lackland Air Force Base (AFB), Texas, on 1 July 1959. OTS moved to the Lackland Training Annex in 1961. In November 1971, the Air Staff launched an extensive curriculum review that produced a core curriculum common to the Air Force Academy, AF ROTC, and OTS. On 22 September 1993, an era ended as OTS class 93-06 graduated at Lackland AFB. OTS began a new era at Maxwell AFB, Alabama, on 25 September 1993 when it became a part of Air University. From its inception, OTS has been committed to providing the best officers in the United States Air Force—a mission requiring dedication, superb instruction, and hard work.

Throughout its history, OTS has adapted to a challenging training environment that fosters its foundation on building future leaders. After graduating 12 women and 78 men in its first class, OTS successfully commissioned more than 500 second lieutenants its first year. By 1964 more than 10,000 individuals had graduated, and to date more than 96,000 officers have entered the Air Force through OTS. Over the years, OTS has functioned as a "flexible partner" to the other accessions sources to meet the constantly changing manning requirements of the Air Force. Additionally, the school began training already commissioned medical students, chaplains, and judge advocates in 1981 and medical service officers in 1991. In 1997 the Commissioned Officer Training School combined training programs for chaplains, judge advocates, and medical service officers and have trained over 7,000 newly commissioned officers.

OTS commissioning and training programs

- ? instill a commitment to the profession of arms,
- ? inspire internalization of AF core values,
- ? enhance officership skills,
- ? provide a relevant, up-to-date curriculum,
- ? meet USAF production goals, and
- ? create the best possible training environment.

#### Courses

OTS consists of two programs: Basic Officer Training (BOT) and Commissioned Officer Training (COT). BOT leads to a line officer commission as a second lieutenant. COT provides initial officership training for Air Force judge advocates, chaplains, and medical officers.

### **Basic Officer Training**

BOT is a challenging program that imparts to its graduates the importance of discipline, attention to detail, dedication to service, and leadership. It stresses commitment to the profession of arms and motivates graduates to achieve the highest standards of integrity, excellence in all they do, and service before self. This challenging environment provides numerous tests for leadership skills through classroom and field training exercises and operation of the officer trainee wing. A four-day, three-night aerospace expeditionary force (AEF) exercise is the capstone event for BOT.

### **Commissioned Officer Training**

COT was developed in 1996. It provides the fundamentals of officership and the initial leadership training required for newly commissioned AF officers (active duty and Air Reserve Component). It stresses commitment to the profession of arms and motivates graduates to achieve the highest standards of integrity, excellence in all they do, and service before self. The rank of COT students ranges from second lieutenant to colonel depending on the newly commissioned officers' professional qualifications. A three-day, two-night AEF exercise is the capstone event for COT. The Medical Readiness Indoctrination Course (MRIC) is incorporated into the AEF exercise for medical service officers.

The Reserve Commissioned Officer Training (RCOT) course was developed in 1999. This course is currently in a test phase to determine how to best meet the needs of the Air Force's Reserve Component. It combines correspondence work and a Web-based pretest with a demanding 14-day in-residence course.

# **Programs and Operations**

OTS currently conducts split operations at Maxwell AFB and at the Maxwell AFB-Gunter Annex. Additionally, the AEF exercise, Vigilant Warrior, is conducted at a 200-acre field-training site near Lake Jordan,

Alabama. BOT operations are conducted at Maxwell AFB and the Vigilant Warrior training site. COT operations are conducted at Maxwell AFB, Maxwell-Gunter Annex, and the Vigilant Warrior training site.

The OTS program is continually assessed with survey data, and course content is reviewed to improve program effectiveness. There is currently an ongoing \$52 million military construction (MILCON) project at OTS to build a new campus. The new 40-classroom academic facility, fitness center, dining facility, and two 90-room dormitories are complete. One dormitory and an academic addition are currently under construction. An additional dormitory is funded, and upon completion of all these projects by FY 2005, all OTS operations will be consolidated at Maxwell AFB.

OTS makes every effort to furnish incoming officer candidates with information to facilitate their transition to commissioned officer status. The OTS home page (http://ots.afoats.af.mil/), gives prospective trainees ready access to current information on OTS. The home page assists students on how to prepare mentally and physically for OTS.

Other initiatives include a newly revamped, intensive physical conditioning program designed to build endurance and strength and to improve students' knowledge of the AF wellness lifestyle. Formal retreat ceremonies instill a sense of pride for AF customs and courtesies. An interservice athletic competition with Army and Navy counterparts in joint military athletic events increases pride and understanding of sisterservice programs.

#### Curriculum

The major areas of instruction are leadership studies, military training and application, profession of arms, military studies/international security studies, and communications skills. OTS teaching methods include auditorium lectures, readings, flight room classes (informal lecture, guided discussion, and case studies), and field leadership activities (sports campaigns, Leadership Reaction Course, and Vigilant Warrior).

### **Duration and Quota**

OTS currently conducts eight BOT classes, 10 COT classes, and two RCOT classes each year. The BOT program is 12 weeks long (60 training days), the COT program is four weeks long (23 training days), and the RCOT program is two weeks long (14 training days) plus the correspondence portion. In fiscal year 2001, BOT will graduate approximately 1,850 students, and COT will graduate nearly 1,500 students—total yearly production of approximately 3,300. In fiscal year

2001, BOT will have about 250 officer trainees per class. COT will have an average of 125 students per class.

# **Prerequisites and Selection**

Students attending BOT must have a bachelor's degree, be less than 30 years of age (waiverable to the age of 35), and meet the minimum physical requirements for becoming an officer. Competition for entry into this program is quite rigorous.

### **Curriculum Summaries**

# **Basic Officer Training**

Instructional Area	Academic Hours
Leadership Studies	39.75
Communication Skills	47.25
Profession of Arms	42.00
Military Studies	31.75
Military Training and Application	124.00
Admin/Processing/Testing/Orientation	161.25
TOTAL	446.00

# **Commissioned Officer Training**

	Academic
Instructional Area	Hours
Leadership Studies	31.75
Communication Skills	9.50
Profession of Arms	34.25
Military Studies	15.75
Military Training and Application	17.50
Admin/Testing	49.75
AEF Exercise	36.50
TOTAL	195.00

# Reserve Commissioned Officer Training (In-Residence Portion)

Instructional Area	Academic Hours
Leadership Studies	18.50
Communication Skills	7.00
Profession of Arms	19.50
Military Studies	13.00
Military Training and Application	11.50
Admin/Testing	22.75
AEF Exercise	29.00
TOTAL	121.25

# **ACADEMIC EDUCATION**

The Air University has expanded its academic accreditation and degree-granting education opportunities for qualifying members of the Air Force, other US armed forces (including the Reserves and National Guard), Department of Defense employees, and international officers. The Community College of the Air Force awards associate degrees in many academic subjects. The Air Force Institute of Technology has been granting accredited academic degrees, including the doctor of philosophy degree, for many years. AU has gained degree-granting authority from Congress for the School of Advanced Airpower Studies, Air War College, and Air Command and Staff School. The School of Advanced Airpower Studies awards a fully accredited master's degree. All three of these schools award a master's degree. The Air University is seeking accreditation of its Air War College and Air Command and Staff College master degrees. The programs of the latter two schools are described above.

### COMMUNITY COLLEGE OF THE AIR FORCE

Col James M. McBride, Commander/President Lt Col Jeffery K. Little, Vice Commander/Executive Vice President

#### Internet Address

http://www.maxwell.af.mil/au/ccaf/

**Mission:** Offer and award job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of Air Force enlisted members.

The Community College of the Air Force (CCAF) serves the educational needs of the AF enlisted community by offering associate in applied science degrees and other credentialing programs that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of AF enlisted members. It is the only federally chartered institution in the United States that awards college degrees solely to USAF enlisted personnel.

The college was established in April 1972 at Randolph AFB, Texas; relocated to its present location, Maxwell AFB, Alabama, in April 1979; and realigned under Air University in July 1993. The college mailed its first official transcript in November 1972 and issued its first career education certificate in August 1973.

The college received degree-granting authority in July 1976 and awarded its first associate in applied science degree in April 1977. The CCAF is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097: telephone number [404] 679-4501) to award the associate in applied science degree.

With more than 370,000 registered students, the college is the largest multicampus community college in the world. Its affiliated schools are located in 36 states, the District of Columbia, and six foreign locations. More than 6,000 CCAF faculty members provide quality instruction for the professional development of enlisted personnel. The college has awarded more than 218,000 associate in applied science degrees to enlisted members of the active duty AF; ANG; Air Force Reserve Command (AFRC); and enlisted members of the Army, Navy, and Marine Corps teaching in CCAF-affiliated schools.

### **Associate in Applied Science Degree**

CCAF awards associate in applied science degrees in the following areas:

Aircraft and Missile Maintenance Allied Health Electronics and Telecommunications Logistics and Resources Public and Support Services

CCAF degree programs consist of a minimum of 64 semester hours. To graduate, students must hold the journeyman (five) level in the appropriate Air Force specialty code (AFSC) at the time of program completion and have a minimum of 16 semester hours of CCAF credit applied to their degree program. Students must complete all degree requirements before separating, retiring, or becoming commissioned officers.

Academic Requirements	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education (3 hours in each of following)	15
Oral Communication	3
Written Communication	3
Mathematics	3
Social Science	3
Humanities	3
Program Elective	15
TOTAL	64

### **CCAF System**

The college functions as a single institution with respect to credit documentation, records, and educational program management. The system is supported by the Air Force Recruiting Service, USAF Occupational Measurement Squadron, Airman Classification Squadron, and Headquarters AETC. These agencies provide the recruitment, job analysis, and staff support required for successful operation of the system.

#### **Affiliated Schools**

The instructional programs of the college are conducted by the Air Force in traditional learning environments. Even when advanced instructional technology and individualized instruction are used, students attend regularly scheduled classes and complete specified course work under assigned faculty in much the same manner as students in the classrooms of most traditional civilian colleges except that students typically attend one course at a time, eight hours each day, five days a week until satisfactorily completing the course.

What is often perceived as nontraditional about the college is its form of organization and administration. AF schools provide instruction at numerous locations because of the geographic mobility of the students as they pursue their AF occupations. Accordingly, each of these separate education and training organizations, called affiliated schools, is a component of a worldwide educational system.

#### **Education Services Centers**

The general education component of every degree program must be completed in civilian colleges and/or through nationally recognized testing programs, during off-duty time, with the Air Force paying a portion of the tuition costs. Counseling of students is accomplished by trained education counselors located on all major AF installations and CCAF advisors at each ANG and AFRC installation.

The education services centers administer the College-Level Examination Program, Defense Activity for Non-Traditional Education Support Subject Standardized Tests, and Excelsior College Examinations. They also conduct formal graduations worldwide during the months of April and October.

### **Advisory Bodies**

The college uses several advisory bodies composed of members from the CCAF administrative staff, CCAF system, and appointed civilian members. These advisory bodies provide the college with direction and customer feedback, set policies and procedures, and facilitate communication throughout the system.

**Board of Visitors.** The CCAF Board of Visitors is a federal advisory committee consisting of up to 12 appointed members from education, business, and industry. The appointed members represent the public interest and serve with ex officio members who represent the interests of the Air Force, the institution, faculty, and student body.

**Affiliated Schools Advisory Panel.** Members represent categories of technical training, field training, enlisted professional military education, and command-sponsored schools affiliated with the college. The panel provides a forum for reaffirming CCAF's commitment to providing job-relevant educational opportunities to all enlisted personnel.

**Education Services Advisory Panel.** The panel includes the CCAF dean of academic affairs and education services advisor, Headquarters USAF and MAJCOM personnel, base-level education services personnel, and ANG/AFRC counterparts. The panel provides an interface between the college and the education services system.

**Expanded Policy Council.** Twenty-two representatives from all elements of the CCAF system make up the Policy Council. The council, chaired by the CCAF dean of academic affairs, meets twice a year and submits recommendations concerning academic policies, degree programs, award of credit, academic standards, affiliation of AF schools with the college, and other policy matters to the commander/president.

# AIR FORCE INSTITUTE OF TECHNOLOGY

Col Michael L. Heil, Commandant Col Joseph H. Amend III, Vice Commandant

Internet Address http://www.afit.edu

**Mission:** Provide responsive, defense-focused graduate and continuing education, research, and consultation to improve Air Force and joint operational capability.

The Air Force Institute of Technology (AFIT) supports the Air Force and national defense through responsive degree-granting graduate and professional continuing education (PCE), research, and consulting services to AF and DOD agencies. Graduate-level work offers carefully selected officers, AF civilians, and international officers the broad educational experience necessary for understanding the role of technology in national defense and in analyzing and solving defense-related problems. PCE programs support AF and DOD needs for immediately applicable knowledge and help prevent scientific and technical obsolescence.

Through integrated teaching and research, AFIT meets the challenges of advances in defense-related technologies. The effective relationships between the institute and other AF and DOD organizations create a unique environment in which education and research provide faculty and students a variety of programs in which to participate. The faculty members—highly qualified military and civilian professionals—stay abreast of ongoing and projected AF operations. Continuous updates of the academic program offer students the latest available technical knowledge and applications. The institute's flexibility enables it to respond quickly to changing AF requirements.

AFIT provides graduate education programs through the Graduate School of Engineering and Management. The School of Systems and Logistics and the Civil Engineer and Services School provide many PCE short courses to assist AF and DOD military and civilian members who wish to become more proficient in their technical and support tasks. The Civilian Institution Programs office manages specialized graduate school assignments required by a variety of AF needs, including medical and instructional assignments. The Academic Library and the Directorates of Admissions/Registrar, Resources, Mission Support, Public Affairs, and Communications and Information support the educational and research programs of the institute.

Specific information about AFIT and each of its educational, research, and consultation services are spelled out in the AFIT Catalog. The catalog is available on-line (http://www.afit.edu).

### **AFIT History**

AFIT traces its roots to the early days of powered flight when it was apparent that the progress of military aviation depended upon special education in this new science. In 1919 the Air School of Application was established at McCook Field in Dayton, Ohio, the home of Orville and Wilbur Wright.

When Congress authorized creation of the Air Corps in 1926, the school was renamed the Air Corps Engineering School and moved to Wright Field in 1927. Shortly after Pearl Harbor, the school suspended classes, but it reopened as the Army Air Forces Engineering School in 1944 to conduct a series of accelerated courses to meet emergency requirements.

After World War II, in 1946, the Army Air Force Institute of Technology was established as part of the Air Materiel Command (AMC). The institute was composed of two colleges: Engineering and Maintenance, and Logistics and Procurement. These colleges were later redesignated the College of Engineering Sciences and the College of Industrial Administration.

When the Air Force became a separate service in 1947, the institute was renamed the Air Force Institute of Technology. That same year, the School of Civil Engineering Special Staff Officer's Course began. In 1948 civilian institution programs were transferred to AFIT.

In 1950 command jurisdiction of AFIT shifted from AMC to AU with headquarters at Maxwell AFB, Alabama. The institute, however, remained at what was now known as Wright-Patterson AFB. In 1951 the two AFIT colleges were combined into the Resident College.

The institute established a logistics education program at Wright-Patterson AFB in 1955, and Ohio State University conducted the first courses on a contract basis. In 1958 AFIT began a series of short courses in logistics as part of the Air Force Logistics Command (AFLC) Education Center. Later that year the School of Logistics became a permanent part of AFIT.

In 1954 the 83d Congress authorized the commander of AU to confer degrees upon students in the AFIT Resident College. The college was later divided into the School of Engineering, the School of Logistics, and the School of Business. The first undergraduate engineering degrees were granted in 1956, and the first graduate degrees in business in 1958. The School of Business programs were transferred to civilian universities in 1960.

In 1963 the School of Logistics was redesignated the School of Systems and Logistics. The Civil Engineering Center was also redesignated as the Civil Engineering School.

In 1967 AFIT became a member of the Dayton-Miami Valley Consortium (DMVC), which later changed its name to the Southwestern Ohio Council for Higher Education (SOCHE). The council is an association of colleges, universities, and industrial organizations in the Dayton area that are united to promote educational advancement. AFIT has traditionally been active in both the council and in other community and interinstitutional programs.

As AFIT begins its ninth decade of operation, the staff and faculty reflect with pride on the contributions its graduates of resident schools and civilian institutions have made to engineering, science, technology, medicine, logistics, and management throughout the Air Force. These immeasurable contributions have been vital to our national security.

AFIT's flexibility allows it to adjust quickly to changing AF requirements. The faculty, comprised of highly qualified military and civilian personnel, stays abreast of projected AF operations; and the programs are continually updated to offer its students the latest available material. For example, an *Air Force Software Review* in 1989 led to AFIT programs in software engineering and software systems management barely a year later. When environmental concerns culminated in the *Pollution Prevention Act of 1990*, AFIT designed and implemented both graduate and professional continuing education programs in environmental engineering management.

During the past 80 years, more than 266,000 DOD personnel—including 30 US astronauts—have attended AFIT programs.

In 1992 AFIT reorganized from four to five schools by specifically separating graduate education and PCE. Early in FY 1997, the Secretary of the Air Force made a decision to close AFIT resident graduate schools. In anticipation of closure, AFIT developed and began a transition and closure plan. Resident PhD students scheduled for FY 1997 were diverted to the Civilian Institution Programs and a transition plan for actual closure was developed, identifying manpower positions for elimination in fiscal years 1997 through 2000.

After a visit to AFIT in April 1998, then Acting Secretary of the Air Force, F. Whitten Peters announced a reversal of the Air Force decision to terminate the AFIT resident graduate programs. AFIT was to continue a restructuring initiative begun in FY 1996 that would size the resident graduate programs to meet the Air Force education requirements of the FY 2003 force structure.

On 1 October 1999, as a result of the AFIT restructure, AFIT's two graduate schools were combined to become the Graduate School of Engineering and Management.

In the fall of 2000, AFIT completed construction on an \$8.9 million engineering laboratory. The lab, whose construction began in December

1998, will be used for experimental research in aeronautical engineering, electrical engineering, applied physics, and environmental science.

The future promises to be challenging, but AFIT will continue to provide the environment and the opportunity for AF personnel to develop the professional and technological skills needed to master this dynamic challenge.

### **AFIT Campus**

The institute's campus at Wright-Patterson AFB, Ohio, consists of Bane Hall, which houses the Graduate School of Engineering and Management; Twining Hall, home of the School of Systems and Logistics; and Kenney Hall, which houses the command section and main auditorium and connects Bane and Twining Halls. A fourth building, opened in the fall of 1994, is connected to Twining Hall and is the home of the Civil Engineer and Services School. A fifth building, the 30,000-square-foot graduate engineering research laboratory, was officially opened in January 2001. Pending completion of expansion projects, the Civilian Institution Programs offices are collocated with the Aerospace Systems Center in a building off the main AFIT campus.

#### Admission

AFIT's graduate education programs are designed to meet specific AF and DOD needs. Eligibility criteria for admission vary from program to program and are targeted for officers and DOD civilians. Academic qualification for admission to the institute's graduate programs, either in residence or at civilian institutions, is comparable to that of any quality graduate institution. In addition, the military accomplishments and potential of the candidate are considered before assignment to any program.

Attendance at AFIT's PCE courses is determined by functional duty requirements. The level of the course and the educational background and professional experience of the candidate are considered to ensure that the participant will be able to benefit from the learning experience.

### **International Affairs**

The International Affairs (IA) Directorate is responsible for assisting international military officers and international government civilian employees with the procedures of application for admittance to the graduate and PCE programs at AFIT. Prospective foreign students apply to AFIT through the US Security Assistance Officer (SAO) at the US

Embassy in their home countries. Application packages for evaluation for eligibility should arrive at the International Affairs Directorate (AFIT/IA) by the end of April each year in preparation for entrance the following September. Application packages should include undergraduate transcripts reflecting the undergraduate degree; graduate transcripts, if applying for a PhD; Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) score reports, as applicable for the program requested; and Test of English as a Foreign Language (TOEFL) scores. Packages should be mailed to:

AFIT/IA 2950 P Street Wright-Patterson AFB, OH 45433-7765

Or, applicants may call (937) 255-6800, send a fax to (937) 255-9981, or send electronic mail to AFIT.IA@afit.edu.

# **Graduate School of Engineering and Management**

Dr. Robert A. Calico Jr., Dean

*Internet Address* http://en.afit.edu

The Graduate School of Engineering and Management offers advanced scientific, engineering, and management education to qualified AF officers and civilians. Graduates are assigned a wide range of positions in a rapidly changing technological environment. They become not only practicing engineers and managers but also broadly educated leaders capable of directing AF research, support, and development programs. The school is comprised of the Departments of Mathematics and Statistics, Electrical and Computer Engineering, Engineering Physics, Systems and Engineering Management, Operational Sciences, and Aeronautical and Astronautical Engineering.

### **Resident Degree Programs**

AFIT's Graduate School of Engineering and Management offers resident graduate degree programs in which students can earn a master's or doctorate degree. The resident master's degree program is 18 months in length, while the PhD program generally requires three years. These programs prepare AF officers primarily for specially designated advanced assignments in areas of science, engineering, and management. In addition to providing quality academic instruction in a

relevant discipline, the institute customizes degree programs to specific needs of the AF and the DOD, as suggested by users and technological advancements.

The Graduate School of Engineering and Management currently offers master's degree programs in aeronautical engineering, applied mathematics, applied physics, astronautical engineering, computer engineering, computer systems, electrical engineering, electro-optics, engineering and environmental management, environmental science and engineering, materials science, military meteorology, nuclear engineering, operations research, space operations, and systems engineering. Other master's degree areas include programs in logistics, acquisition, information systems, and information resource management. Programs leading to the PhD degree offer areas of specialization in aeronautical engineering, applied mathematics, applied physics, astronautical engineering, computer engineering, computer systems, electrical engineering, electro-optics, materials science, nuclear engineering, and operations research. All programs meet educational requirements common to a wide range of AF assignments.

#### Accreditation

AFIT is accredited by the Higher Learning Commission and is a member of the North Central Association. The North Central Association can be contacted at:

The Higher Learning Commission NCA 30 North LaSalle Street, Suite 2400 Chicago, IL 60602-2504 Phone: (800) 621-7400

In addition to institutional accreditation, the Accreditation Board for Engineering and Technology accredits selected programs within the Graduate School of Engineering and Management. Their address is:

Accreditation Board for Engineering and Technology, Inc. 111 Market Place, Suite 1050 Baltimore. MD 21202

Phone: (410) 347-7700 Fax: (410) 625-2238

#### **Facilities**

The Graduate School of Engineering and Management is located at Wright-Patterson AFB, near the headquarters of the Air Force Research Laboratory (AFRL) and five of its directorates—the largest aerospace research facility in the Air Force. The academic programs offered at the school take advantage of the facilities and expertise available at these AFRL facilities. Students are able to interact directly with researchers and engineers working on AF projects. The full spectra of research, development, and acquisition facilities at Wright-Patterson AFB are used by a cadre of AF scientists, engineers, and management specialists, who assist AFIT as adjunct professors and lecturers through their association and aid to course work, development, and instruction.

The school includes extensive laboratories in the Departments of Aeronautics and Astronautics, Electrical and Computer Engineering, and Engineering Physics. The Department of Aeronautics and Astronautics laboratories include facilities for the study of internal and external aerodynamics, system dynamics and control, propulsion, combustion, heat transfer, fatigue, fracture, experimental stress analysis, task automation, and space systems.

The Department of Electrical and Computer Engineering operates facilities for the design and test of flight control and avionics concepts, integrated circuit fabrication and testing, low observables and electronic warfare support, and a full range of computer systems. The Department of Engineering Physics laboratories support research in laser spectroscopy, nonlinear optics, solid-state physics, nuclear radiation detection, nuclear effects, and environmental monitoring. The AFIT's Center for Directed Energy is housed within the Engineering Physics Department. The Center for Directed Energy supports AF and DOD agencies in transitioning high-energy lasers and high-power microwaves to the battlefield through vigorous scientific and engineering research, graduate education programs, and diverse consulting activities.

A mixture of workstations and personal computers networked throughout the facility supports education and research. The Department of Operational Sciences operates the AFIT Center for Modeling, Simulation, and Analysis. This center provides computing and technological capability for research that applies state-of-the-art mathematical and computing technologies to the solution of operational problems to support better decision making, planning, and scheduling in complex command, control, and war-fighting systems.

### **Faculty**

The faculty of the Graduate School of Engineering and Management consists of 100 members; one-half are military officers.

Nearly all faculty members hold PhD degrees in their areas of specialty. Faculty members teach approximately 440 graduate-level courses per year and are heavily involved in research. In FY 2000, AFIT graduate faculty produced 88 refereed journal articles, 132 other publications, and 198 contributions to proceedings at national and international symposia. Faculty members were also involved in 105 funded research projects during this period.

### **Research and Consulting**

Research and consultation activities are integral elements of the work of any university. AFIT requires a dissertation or a thesis in all resident graduate degree programs. AF organizations sponsor research performed by students who complete thesis requirements on topics of interest to the AF and DOD. AFIT's consultation services offer DOD organizations and other government agencies the expertise of the faculty in their professional disciplines. Consulting activities also provide the faculty an opportunity for professional development and growth and exposure to the latest in defense-related concepts and concerns, which are incorporated into instruction.

In FY 2000, AFIT graduate students completed 161 master's theses and eight PhD dissertations. Of these, over 87 percent contributed to an AF, DOD, or government agency project. Over 50 percent of AFIT theses were in direct support of Air Force Materiel Command, headquartered at Wright–Patterson AFB. AFIT graduate student research efforts in FY 2000 resulted in approximately \$26.9 million in cost avoidance savings for sponsors, and faculty research efforts produced over \$3.2 million in research grants.

The school's collocation with the AFRL, the AF's largest center of research, development, and materiel activity, produces a synergistic relationship resulting in an atmosphere that balances the theoretical and practical aspects of research and instruction. Close association with engineers and scientists actively engaged in AF research and development keeps research focused on AF technology needs.

### **Further Information**

The Graduate School of Engineering and Management publishes several documents annually that provide detailed information about the graduate school's programs, degree requirements, and research activities.

Detailed information about the graduate school's programs is found in the *Graduate School of Engineering and Management Catalog*. The catalog is located on AFIT's Web site at http://en.afit.edu. Paper or CD-

ROM copies of the catalog can also be requested by contacting the Registrar's Office at:

AFIT/RRD 2950 P Street Wright-Patterson AFB, OH 45433-7765 (937) 255-6234, ext. 3137/3122

The Office of Research and Consulting publishes a research report documenting student and faculty research activity, sponsored program support, and research assessment questionnaire results. This report is routinely distributed to research sponsors and potential collaborates. Copies can be obtained upon request by contacting the ENR via any of the following ways:

Mailing address: AFIT/ENR 2950 P Street Wright-Patterson AFB, OH 45433-7765

E-mail address: afit.enrsta@afit.edu

Internet address: http://en.afit.af.mil.edu/enr

# **School of Systems and Logistics**

Col Joseph B. Michels

Internet Address
http://ls.afit.edu

AFIT's School of Systems and Logistics (LS) is the Air Force's sole provider of PCE courses in the areas of acquisition, logistics, and software engineering. A multiservice faculty teaches approximately 225 offerings of 39 courses, varying in length from two days to four weeks. In FY 2000 some 933 students were taught in residence, while an additional 4,504 students were taught in classes conducted at various locations in the CONUS and overseas or through distance learning.

### **Professional Continuing Education**

### **LS PCE Equals:**

- ? Highest quality PCE available anywhere
- ? Fully-funded classes for AF activities
- ? The AF leader in Web-based education for the acquisition and logistics workforce
- ? Professional growth and development opportunities
- ? The tools, skills, and abilities to manage the entire spectrum of a system's life cycle

# **Disciplines**

LS offers over 40 courses, executive seminars, and tailored workshops. Some of the courses available include the areas of:

- ? Reliability Centered Maintenance
- ? Data Management
- ? Operational Requirements
- ? Configuration Management
- ? Life-Cycle Costing
- ? Supply Chain Management
- ? Acquisition Management
- ? Risk Management
- ? Product Support
- ? Software Engineering
- ? Reliability and Maintainability
- ? Production Management
- ? Maintenance
- ? Test and Evaluation
- ? Transportation
- ? Combat Logistics
- ? Team Building
- ? Acquisition and Logistics Reform
- ? Financial Management
- ? Earned Value Management

# **Faculty**

The LS faculty is a unique combination of over 50 AF, Army, and Navy officers and DOD civilians who combine extensive practical field experience with academic expertise and a driving desire to provide whatever education, consulting, and other support our customers need.

### **Delivery Modes and Funding Information**

**Resident Course Offerings.** LS pays for travel and per diem for USAF students.

**On-Site Course Offering.** LS pays for faculty travel and per diem for all scheduled course offerings. Additional offerings may be negotiated with the school.

**Web-Based Course Offerings.** LS pays for all costs associated with our Internet courses.

### Tailored Courses, Seminars, and Workshops

Resident and on-site presentations are both available. Individualized courses, seminars, and workshops designed to meet unique or recurring needs are LS's specialty.

### **Management and Technical Consulting**

The LS faculty provides individualized consulting services to AF and DOD customers. This includes consultation in their areas of management and technical expertise and small group and team facilitation. They have a long and proven record of providing premier consulting services to such activities as acquisition program offices, depot maintenance organizations, other DOD and federal agencies, and friendly and allied nations, to highlight a few.

# **Civil Engineer and Services School**

Col Joseph H. Amend III, Dean

Internet Address
http://cess.afit.edu

The Civil Engineer and Services School (CESS) provides PCE for selected individuals in the civil engineer and services career fields. In its capacity as a center of professional education and development, the school has established integrated programs including resident continuing education, nonresident courses and seminars, and consultation services.

### **Professional Continuing Education**

Each of the school's PCE programs satisfies a specific and integrated career need of the students. The resident program provides the education that an officer or civilian needs over a lengthy career in AF civil engineering or services. The school offers primarily management-oriented courses. The technical offerings update and broaden the professional and technical knowledge of architects and civil, electrical, mechanical, industrial, and general engineers. These courses provide both management doctrine and applications for development of career professionals as they rise in the management structure. The fundamental objective is to return the students to their assignments better prepared to do their jobs. Specific courses offered vary from year to year depending on the needs of the career field.

The school offers PCE courses at or near the student's normal duty location through a nonresident program consisting of on-site courses, seminars, and satellite instruction. Some on-site seminars are conducted on a regional basis and focus on a specific function or field problem common to several bases in the area. For these seminars, faculty members conduct the educational program at a centrally located base. In FY 2000, CESS used the Air Technology Network (ATN) to deliver education to 536 students, while 1,006 students received education through on-sites, and 1,251 students attended resident classes at the school.

### **Faculty**

CESS is organized into the Departments of Engineering Management, Environmental Management, Services Management, and the Academic Support Division. The faculty is composed mainly of AF officers with advanced degrees and recent field experience in civil engineering and services, as well as professional competence in a related professional discipline. Highly qualified civilian experts in specific management areas complement the military faculty. Guest lecturers further enhance the program of instruction.

#### Consultation

Faculty members provide consultation services to customers worldwide. Their research and consultation provide assistance to the AF through advice on and analysis of current problems. CESS is a source of

knowledge and expertise tailored to support the technical and management needs of the AF and the DOD.

# **Civilian Institution Programs**

Col Jose Bolton Sr., Dean

Internet Address
http://ci.afit.edu

The Civilian Institution Programs manage AF officers pursuing educational programs needed to meet specific AF requirements. They provide this advanced education through civilian universities, research centers, hospitals, industrial and business organizations, and governmental agencies. This education covers a broad spectrum of academic disciplines at all degree levels, including postgraduate programs, continuing education programs, and programs jointly sponsored by the Air Force, other governmental agencies, and industrial and business organizations.

Officers selected for extended programs are assigned to AFIT with duty stations at a university, research center, medical institution, industrial firm, or governmental agency. Those selected for continuing education courses attend in a temporary-duty status. Program managers provide administrative support to students and monitor each educational program to ensure that AF requirements are met in the shortest feasible time.

### **Regular Degree Programs**

Finance

Regular degree programs qualify selected officers for validated advanced academic degree positions. Annual requirements are established by Headquarters USAF and include the following fields:

Humanities
Command, Control, and Communication
Mass Communication
Computer Technology
Chemistry
Engineering

International Relations
Meteorology
Management
Foreign Area Studies
Natural Science
Physical Science
Social Science

### **Graduate School Program**

The Graduate School Program places selected US Air Force Academy (USAFA) graduates in 12-month graduate degree programs immediately following their commissioning. Many of these officers proceed to operational assignments requiring an advanced academic degree and then perform follow-on duty as a USAFA faculty member. Degree disciplines mirror and supplement USAFA instructor preparatory requirements.

### **Instructor Preparatory Education Program**

Instructor preparatory education programs prepare selected officers for faculty or staff assignments at the USAFA, AU, or the resident schools of AFIT. Programs in a variety of academic disciplines are determined by the needs of each organization.

### Fellowships, Scholarships, and Grants Program

This program offers advanced degree and postgraduate research opportunities to officers who win scholarships in public competition. Opportunities are available in several academic disciplines.

### **Legal Education Degree Programs**

There are three different categories of opportunities for legal education through AFIT. The first of these is the Funded Legal Education Program (FLEP). FLEP provides officers up to 36 months to obtain a juris doctorate (JD) degree from a civilian law school and to pass the bar exam.

In the second category is the Excess Leave Legal Education Program. During this program, students receive no pay or allowances, do not accrue annual leave, and pay their own tuition and fees. Students are allowed up to 36 months to obtain their JD degree and to pass the bar exam.

Finally, graduate-level education is available that enables judge advocate general officers to obtain a master of laws degree through a civilian institution. This program lasts nine to 12 months.

### **Education Delay Program**

The Education Delay Program allows selected college graduates in AFROTC to defer entry to active duty to pursue further education at their own expense. Major fields of advanced study are medicine, law, engineering, and physical science.

### **Bootstrap Permissive TDY Program**

The Bootstrap Permissive TDY Program allows officers to complete graduate degrees at their own expense under the provisions of AFI 36-2306, *Operation and Administration of the Air Force Education Services Program*. Officers in graduate programs of 180 days or longer are managed by the institute; their respective units of assignment manage all other bootstrap students.

### **Education with Industry Program**

The Education with Industry (EWI) Program is a 10-month, nondegree internship program sponsored jointly by AFIT, leading industries, and government agencies throughout the country. EWI programs are designed to develop qualities and abilities in selected officers and civilians necessary for effective acquisition management and professional or technical leadership.

### **Industrial Development Education in Acquisition Program**

The Industrial Development Education in Acquisition Program is a short-term program designed to improve acquisition relationships between the government and defense contractors. The program places highly experienced officers and civilians with various defense contractors for five to six months. These selected AF personnel are provided an opportunity to experience the rewards and pitfalls of a defense contractor in an era of declining budgets and layoffs.

#### **Health Care Education Division**

The Health Care Education Division offers graduate and postgraduate programs for Air Force Medical Service officers in response to the requirements of the AF Surgeon General. They include residency and fellowship programs for active duty AF medical and dental officers, graduate and fellowship programs for Biomedical Science Corps officers,

graduate programs for Nurse Corps and Medical Service Corps officers, and the F. Edward Hebert Armed Forces Health Professions Scholarship and Financial Assistance Program (HPSP/FAP). In addition, it manages the medical PCE program, satisfying the continuing education needs of AF Medical Service officers.

### **Medical/Dental Residencies and Fellowships Branch**

Under this AF program, active duty Medical Corps and Dental Corps officers are sponsored in civilian, DOD, Army, and Navy institutions in advanced medical/dental programs. These residents and fellows are selected each year to maintain adequate numbers of specialty-trained physicians and dentists for clinical practice in the future. The selection process is very competitive. Once an officer has been selected for advanced education and assigned to AFIT, fellows and residents are closely monitored to ensure successful completion of their demanding programs.

#### **Allied Health Education Branch**

This program places Nurse Corps, Biomedical Sciences Corps, and Medical Service Corps students in AFIT-funded graduate and postgraduate degree programs at over 65 institutions nationwide. Candidates for these programs are selected each year by the AF Personnel Center to fulfill specific requirements identified by the Integrated Forecasting Board (IFB). Once placed, students are monitored to ensure their curricula align with IFB requirements and that they maintain a satisfactory academic performance and graduate in the shortest time possible.

# Armed Forces Health Professions Scholarship and Financial Assistance Program Branch

HPSP/FAP scholarships are available to military and civilian applicants. The HPSP provides two-, three-, and four-year scholarships (including a monthly stipend) to qualifying students attending accredited medical, osteopathic, dental, and optometry schools. A scholarship leading to a master of science in nursing is also available. Scholarships of variable length are available for third- and fourth-year dental students. While in the HPSP, students serve as inactive Reserve officers.

The FAP provides an annual grant and monthly stipend to qualifying physicians completing residency requirements in selected specialties needed by the AF. While in the FAP, students serve as inactive Reserve officers. Qualifications and application procedures for these programs are published in AFI 41-110, *Applying to Medical School and Medical Programs*, and for the HPSP/FAP in AFITI 36-101, *Armed Forces Health Professions Scholarship and Financial Assistance Program*. Both regulations can be found on-line at http://ci.afit.edu.

#### **Medical PCE Branch**

This program randomly selects and funds active duty medical service officers (all corps) to maintain currency and accreditation in their area of specialization through short-course attendance at civilian-sponsored programs. Medical service officers select individual courses that are most appropriate for their professional specialty and meet AF criteria (e.g., appropriate sponsorship, continuing medical education credits). These courses are usually two to seven days in length. Qualifications and application procedures are outlined in the fact sheet located on-line at http://ci.afit.edu. The fact sheet also contains a link to *The Education and Training Course Announcements Catalog*.

### SCHOOL OF ADVANCED AIRPOWER STUDIES

Col Stephen D. Chiabotti, Commandant and Dean

Internet Address
http://www.maxwell.af.mil/au/saas

**Mission:** To educate strategists in the art and science of aerospace warfare, thus enhancing the Air Force's capacity to defend the United States through the control and exploitation of air and space.

A revolution in AF PME began in the late 1970s. As it continued in the 1980s, the revolution led Air Force chief of staff Gen Larry D. Welch to charter a new graduate school, the School of Advanced Airpower Studies (SAAS), at AU in 1988. Beginning with the graduation of the first class, SAAS has produced many of USAF's most influential and innovative airpower strategists and leaders. The first class convened in the summer of 1991 and graduated in June 1992.

SAAS is an 11-month, follow-on school for selected graduates of intermediate-level DOD PME schools. SAAS educates strategists in the art and science of aerospace warfare to enhance the USAF's capacity to defend the United States through the control and exploitation of air and space. SAAS creates warrior-scholars who have a superior ability to develop, evaluate, and employ airpower. Upon completion of all requirements and with faculty recommendation, graduates receive a master of airpower art and science degree.

SAAS faculty members hold a doctorate or equivalent in their fields of academic expertise. The breadth, depth, and diversity of their expertise are enhanced by the fact that one-half of the SAAS faculty members are field grade or higher officers; the remaining faculty members are civilian scholars.

#### Resident Curriculum

The curriculum has three phases. The first phase courses focus on theories of war and airpower application. Phase two courses focus on the experience of air and space power in all types of conflict. The third phase courses focus on providing students with opportunities to apply the insights and knowledge gained during the first two phases. The SAAS curriculum

- 1. develops and enhances students' abilities to think critically about important and complex issues,
- 2. facilitates critical thinking by providing students with a knowledge base in military theory,
- 3. facilitates critical thinking by providing students with a knowledge base in air and space power theory and history,
- 4. facilitates critical thinking by providing students with a knowledge base concerning the political influences on airpower employment, and
- 5. develops and enhances students' ability to synthesize and articulate complex concepts concerning air and space power strategy and employment.

The primary instructional forum is the graduate colloquium which facilitates maximum interaction between students and the expert faculty.

### **Graduation and Degree Requirements**

To graduate, a student must

- 1. achieve a weighted grade point average for all letter-graded courses of 3.0 or higher;
- 2. achieve a "pass" grade for all courses graded "pass/fail";
- 3. prepare a thesis based on research in original source materials that meets generally accepted standards of research, analysis, and expression at the master's degree level; and
- 4. successfully complete an oral comprehensive examination conducted by a faculty board.

# **Duration and Quota**

The SAAS curriculum is an intensive 48-week program. Class size is limited to 25 AF officers plus one Army officer and an officer representing the sea services.

# **Prerequisites and Selection**

Admission to SAAS is highly competitive. Those wishing to be admitted must formally apply while attending an intermediate service school in residence. The application process includes a requirement to write an essay on a subject selected by the dean. Applicants must either already have a master's degree from an accredited institution or a bachelor's degree with an overall grade point average of 2.75 or higher on

a 4.0 point scale. AFIT verifies all academic qualifications. A central selection board convened at the Air Force Personnel Center (AFPC) makes the final admission selections among qualified applicants.

### **Curriculum Summary**

(Not listed in order of presentation)

Course Title	Quarter Hours
SAAS 600, Foundations of Military Theory	6
SAAS 601, Decision-Making: A Primer for Strategists	6
SAAS 626, The History of Aerospace Power	9
SAAS 631, The Evolution of Airpower Theory	3
SAAS 632, Strategic Airpower and National Security	6
SAAS 641, Airpower in Small Wars	3
SAAS 665, Space and Information Power	3
SAAS 670, Innovation, Policy, and Future Security	3
SAAS 680, Formulating Airpower Theory	3
SAAS 690, Thesis	10
SAAS 699, Comprehensive Examination	1
TOTAL	53

# SAAS 600, Foundations of Military Theory 6 quarter hours

This course analyzes the writings of military theorists who significantly influenced thought about the art and science of war. Through this analysis, students gain a broad background in the development of military thought and develop critical thinking skills as they test theoretical propositions against the criteria of logic and evidence.

# SAAS 601, Decision-Making: A Primer

# for Strategists

6 quarter hours

A foundation "tools" course that provides a background and understanding of decision-making theories. These tools allow the student to better analyze airpower theories, ideas, issues, and concepts. Defense planning issues are discussed to illustrate decision-making challenges and issues pertinent to future airpower strategists.

# SAAS 626, The History of Aerospace Power 9 quarter hours

This extensive course examines the historical development of aerospace power in terms of organizations, technology, doctrine, and application. It provides the experiential database required for students to evaluate the theories presented in SAAS 631 and to develop their personal theory of aerospace power in SAAS 680.

### SAAS 631, The Evolution of Airpower Theory 3 quarter hours

This course analyzes the development of airpower theory through the writings of the great theorists including Douhet, Trenchard, Mitchell, de Seversky, Slessor, the ACTS faculty, and Warden.

# SAAS 632, Strategic Airpower and National Security

### 6 quarter hours

This course analyzes modern theory and contemporary thought regarding strategic deterrence and coercion; crisis stability; strategic nuclear offense, defense, and proliferation; conventional strategic air attack; force projection; and the adaptation of US grand strategy to changes in the international distribution of power, focusing on the use of airpower to pursue and support these national security objectives.

### SAAS 641, Airpower in Small Wars

### 3 quarter hours

This course, using a definition of small wars popular before World War II, examines the use of airpower in nonstate warfare with a particular emphasis on revolutionary and counterrevolutionary insurgent warfare.

### **SAAS 665, Space and Information Power**

### 3 quarter hours

This course examines the development of military space and information operations, organizations, strategy, and the contentious issues surrounding space and information operations in modern warfare.

### SAAS 670, Innovation, Policy, and Future Security 3 quarter hours

This course focuses on the nexus of technological innovation and defense policy and then examines topical areas of current and potential US defense concerns.

### SAAS 680, Formulating Airpower Theory 3 quarter hours

This course helps students comprehend the entire SAAS curriculum. Colloquia throughout the academic year summarize and synthesize the various courses. Late in the school year, instruction focuses on developing a personal theory of airpower. Students must defend their theory during their comprehensive examination (SAAS 699).

### SAAS 690, Thesis

### 10 quarter hours

The students develop and present to the faculty a research proposal. Once their proposal is approved, the students, with the advice and assistance of a faculty research advisor, prepare a 40- to 60-page thesis based on primary sources. In writing their theses, the students

must demonstrate sound scholarship and conform to generally accepted stylistic and methodological canons.

### SAAS 699, Comprehensive Examination 1 quarter hour

A two-hour oral examination by a board of three SAAS faculty members designed to determine if the student has satisfactorily synthesized the entire SAAS curriculum. Inquiry into a student's personal theory of airpower developed in SAAS 680 is often a prominent feature of the examination.

### **Degree-Granting Authority and Accreditation**

Public Law 103-337, passed by the Congress of the United States on 5 October 1994, authorized SAAS to confer the degree "Master of Airpower Art and Science" upon graduates who fulfill the requirements for the degree.

SAAS is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097, telephone number [404] 679-4501) to award a master's degree.

# PROFESSIONAL CONTINUING EDUCATION

Resident and distance-learning professional continuing education remains an important part of the careers of Air Force enlisted, officer, and civilian personnel. Air University offers short courses of continuing education in different Air Force specialty areas through the Air Force Institute of Technology, the College of Aerospace Doctrine, Research and Education, and the Ira C. Eaker College for Professional Development.

# ACADEMIC INSTRUCTOR SCHOOL

Maj Dwane Chatman, Director

#### Internet Address

http://www.maxwell.af.mil/au/oas/ais

The Academic Instructor School (AIS) is the teaching college for the Air Force. Widely acclaimed by civilian and military educators, AIS is known throughout the DOD for its role in satisfying the requirements of the AF for trained instructors and for its unique contributions to the field of education. The school began operations in 1948 at Craig AFB, Alabama, as part of the Special Staff School. It moved to Maxwell AFB, Alabama, in 1950 and has been in continuous operation since then. Thousands of instructors have completed AIS in residence, including international military personnel from more than 60 countries.

AIS prepares AF and other DOD personnel to teach in diverse educational environments using state-of-the-art educational skills and technologies. The school provides AF and selected DOD instructors with student-centered learning experiences through supervised practice of carefully defined methods of instruction that aid in

- ? applying basic principles of learning to specific learning situations,
- ? planning meaningful instruction,
- ? using sound teaching methods including distributed-learning education.
- ? communicating effectively,
- ? evaluating the achievement of learning objectives, and
- ? eveloping attitudes appropriate for AF and DOD instructional situations.

AIS has initiated several improvements based on graduate and supervisor surveys, student critiques, and advances in educational methods and technologies. These innovations include

- ? ensuring that instructional models and components are consistent with the developmental nature of learning,
- ? teaching students how to design instruction to achieve effective learning outcomes,
- ? researching and determining sound applications of computers and technology in education and using the current technology to educate teachers, and

? using an instructional systems design (ISD) approach in developing curriculum and teaching methodologies.

#### Curriculum

AIS bases its curriculum on a theory of learning, focusing primarily on the use of developmental cognitive and affective taxonomies in planning, delivering, and evaluating instruction. AIS places major emphasis on development of instructional competencies. However, faculty members devote significant time on exploring student characteristics, learning styles, educational theory, attitudinal development, and instructional design.

AIS faculty and staff focus the school's curriculum on educational foundations, methods of instruction, and communication skills. They research and develop materials relating to instructor education and curriculum design. The AIS curriculum incorporates the following six teaching methods: informal lectures, guided discussion, teaching interviews, demonstration performance, case study, and experiential exercises (games and simulations). AIS curriculum design and development efforts encompass the development of sound test questions, an introduction to evaluation, performance evaluation, feedback, test item analysis, domains of learning (including both the affective and cognitive domains), instructional design, an introduction to instructional system development, and concept and principle teaching. The AIS faculty reviews and oversees revisions of Air Force Manual (AFM) 36-2236, *Guidebook for Air Force Instructors*.

## **Duration and Quota**

AIS conducts seven, four-week classes each year with approximately 85 students in each class. Specific class dates and attendance authorizations are announced through the Military Modernization System by way of the Oracle Training Application.

# **Prerequisites and Selection**

Selection for AIS attendance is managed by AF MAJCOMs, other DOD users, and government agency school administrators using criteria outlined in the *Air Force Education and Training Course Announcements (ETCA)*, formerly Air Force Catalog (AFCAT) 36-2223, *USAF Formal Schools*. Additionally, international officers are selected to attend by their countries of origin in coordination with IOS.

# **Regular Academic Instructor Course** (MAIS001)

This course is four weeks long and consists of 157 hours. The ratio of lecture to seminar activities is approximately 20 percent large group to 80 percent small group instruction.

**Curriculum Summary** 

Area of Instruction	Academic Hours
Administrative	6
Educational Foundations	7
Communication Skills	10
Methods	72
Instructional Media	1
Evaluation	18
Instructional Design	42
Instructional Technology	1
TOTAL	157

# **Specialized Courses**

AIS offers special short courses in addition to the regular course. These courses are tailored to specific audiences and emphasize applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. These courses are as follows.

AF Reserve Officer Training Corps Academic Instructor Course. Prepares ROTC instructors for teaching at the college level.

AF Junior ROTC Academic Instructor Course. Educates instructors who teach at the junior high and high school levels.

Air Force Institute of Technology Academic Instructor Course. Prepares instructors and faculty for AFIT's in-residence programs.

Air Command and Staff College Instructor Course. Prepares ACSC faculty for their instructional duties.

Air War College Instructor Course. Prepares instructors to teach at AWC.

AIS Specialized Courses. A two-week mobile course and special two-week courses for instructors at the Squadron Officer School, AF Reserves, Chaplains Service Institute, and other specialized audiences.

Air University Catalog, 2001–2002

Dental Resident Graduate Student Instructional Mobile Course. Prepares instructors for dental resident graduate program at Lackland AFB, Texas.

AIS Advanced Course for Teleseminar Instructors. Teaches instructors how to teach via interactive television.

AIS ISD in Education Course. Teaches students how to use the ISD model in developing curriculum.

Air Force ROTC Noncommissioned Officers Orientation Course. Prepares ROTC NCOs for assignments to their detachments.

#### **Academic Credit**

Through affiliation with the Community College of the Air Force, graduates of AIS who enroll in the CCAF automatically receive 10 semester hours of credit for the four-week course and four semester hours of credit for the two-week course. Graduates may receive transcripts reflecting these credit hours by contacting the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613.

# COLLEGE OF AEROSPACE DOCTRINE, RESEARCH AND EDUCATION

Col Bobby J. Wilkes, Commander Col Stan Norris, Vice Commander

Internet Address
http://www.cadre.maxwell.af.mil/

**Mission:** To assist in the development, analysis, and war gaming of the concepts, doctrine, and strategy of aerospace power and to educate Air Force and joint communities on war fighting at the operational and strategic level through research, war gaming, and military education courses.

The College of Aerospace Doctrine, Research and Education (CADRE) carries on the traditions of the Air Corps Tactical School where, in the 1930s, future leaders of the USAF were trained and the basic doctrine and concepts of US airpower for World War II were formulated. As much as ACTS instructors such as Generals Harold L. George, Haywood S. Hansell Jr., Claire L. Chennault, and George C. Kenney shaped doctrine and strategy in World War II, the college's staff is committed to providing the Air Staff and the major commands with original thought and applications of aerospace power in the modern world. CADRE is located in Walker Hall—named for Brig Gen Kenneth N. Walker, an ACTS instructor and Medal of Honor winner in the Pacific during World War II.

The college assists in educating AF and joint communities on war fighting at the operational and strategic level through research, war gaming, and continuing education courses and publication. CADRE provides

- ? doctrinal research and analysis and development of employment concepts for air and space power;
- ? education of the Air Force in air and space doctrine and the doctrinal application of air and space power;
- ? study and analysis of dynamics of warfare through modeling, simulation, and war gaming; and
- ? intelligence support to AU and its subordinate units.

#### Also CADRE conducts

- ? research on public affairs and mass media issues and assists schools and organizations in developing military news media curricula, and
- ? research on aerospace power topics of interest to senior leaders, research support for all AU schools, and publication of the AF's only professional journal, the *Aerospace Power Journal (APJ)*.

The college creates an interface between research and concept development, testing, and publication. It gives AU the capability to fulfill its mission of assisting in the development of AF doctrine, concepts, and strategy.

CADRE's resident curriculum offerings consist of seven specialized courses: the Joint Flag Officer Warfighting Course (JFOWC), the Joint Force Air Component Commander Course (JFACC), the Combined Force Air Component Commander Course (CFACC), the Senior Information Warfare Applications Course (SIWAC), the Joint Doctrine Air Campaign Course (JDACC), the Contingency Wartime Planning Course (CWPC), and the Information Warfare Applications Course (IWAC). These resident courses

- ? provide flag officer attendees the opportunity to participate in joint combat operation exercises;
- ? provide training to active duty captains through colonels of all services for air campaign planning in conjunction with assignment to joint, combined, and air component command staffs:
- ? provide USAF staff planners an understanding of DOD planning relationships from a joint deployment perspective;
- ? instruct future war planners in the art and science of contingency planning; and
- ? apply and value the principles of information warfare to enhance war-fighting capabilities.

# **Airpower Research Institute**

Col Allan W. Howey, Director Dr. James R. W. Titus, AU Dean of Research

#### **Internet Address**

http://www.research.maxwell.af.mil/default.htm (select organization)

The Airpower Research Institute (ARI) advances the theory and application of aerospace power through research support and

publication. The institute focuses on a single, overriding objective: warrior-scholars contributing to an improved combat capability for the USAF.

The institute promotes aerospace power thought by conducting and publishing original research regarding USAF and airpower doctrine, strategy, and operations.

Resident civilian defense analysts conduct independent and professional research on topics of interest to USAF leaders and policy makers. They produce research papers and briefings that address USAF and airpower doctrine, strategy, and operations to assist the senior leadership of the Air Force.

Military and civilian staff members support student research at all AU schools by maintaining internal AU databases of proposed research topics, faculty expertise, ongoing research, and completed research papers. The research support staff helps set standards for the conduct of research throughout AU by providing research education, tools, and resources—along with technical support—to AU faculty and students.

The institute's Professional Journals Division publishes the *APJ*, the Air Force's professional quarterly and primary institutional forum for exchanging ideas about airpower and other matters relating to national defense. The *Journal* is printed quarterly in English, Portuguese, and Spanish editions. The English language edition is an internal instrument of AF professional development designed to serve as an open forum for presenting and stimulating innovative thinking on military doctrine, strategy, tactics, force structure, readiness, and other matters of national defense. The foreign language editions serve as military-to-military foreign policy instruments of the United States. Finally, the journal's staff serves as the institutional base for *Air Chronicles*, the on-line version of the *APJ* (http://www.airpower.maxwell.af.mil).

# **Warfare Studies Institute**

Col Ernest Howard. Director

#### Internet Address

http://www.cadre.maxwell.af.mil/default.htm (select organization)

The Warfare Studies Institute (WSI) conducts four professional continuing education courses designed to develop the judgment and skills required to employ airpower effectively in combat. The courses offered and supported through the resources of the institute have significantly contributed to the war-fighting capabilities of all US military forces.

The institute conducts the JFOWC, JFACC, and CFACC courses. These premier, executive-level courses prepare officers at the one- and two-star rank from all four services for combat leadership responsibilities in joint and combined arenas. The Flag Officer Division staff develops, plans, and manages PME courses for senior officers from all branches of the US armed forces. This select staff has a wide range of expertise needed to meet the special requirements of senior flag officers attending these courses.

The faculty and staff of WSI conduct additional courses that contribute significantly to the war-fighting preparedness of US military forces. These courses include the Contingency Wartime Planning, Joint Doctrine Air Campaign, Information Warfare Applications, and Senior Information Warfare Application courses.

# MAAFNJ 007, Joint Flag Officer Warfighting Course

JFOWC is the senior PME course in the DOD. The chiefs of staff of all four branches of the US armed forces own and control the course. They delegate course development and execution to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

The course prepares two-star officers of all four services for the responsibilities of theater-level combat leadership. It is tailored to provide our future theater commanders in chief (CINC), service component, and joint task force (JTF) commanders with a broad perspective of the strategic and operational levels of war. Instruction for the course comes from senior national civilian and military representatives, flag officers serving as CINCs, and retired, battle-tested officers. Retired warrior-generals draw from their CINC and component commander experience to lead war-gaming scenarios focused in various parts of the world, across the continuum of conflict.

Through the study of war fighting, military doctrine, and application of unified, joint, and combined combat forces, the attendees will be better prepared to face future crises. JFOWC is a two-week course offered twice a year. Each class is limited to 18 flag officers who represent all military services.

## MCADRE 004, Joint Force Air Component Commander Course

The JFACC is a senior-officer-level PME course hosted by the USAF and sponsored by all four branches of the US military services. The course is designed to prepare potential JFACCs for responsibilities of theater-level combat leadership. The attendees study war fighting, military doctrine, and the application of unified, joint, and combined combat forces, with particular emphasis on airpower employment in

theater-level operations. This course is held once a year in the February time frame.

# MCADRE 007, Combined Forces Air Component Commander Course

The AF hosts and conducts a one-week CFACC course annually. The first three to four days are held at Maxwell AFB, Alabama, and the last two days are held at an operational exercise location. Eighteen active duty officers—one-star, one-star select, or equivalent rank—are selected to attend. The desired attendee mix is five USAF, two US Navy, two US Marine, one US Army, and eight allied flag officers.

# MCADRE 006, Senior Information Warfare Applications Course

AU's newest flag officer course, the five-day SIWAC, is an interagency course and an innovative step in the continuing education of flag officers from all branches of the US armed forces, senior executive service (SES) members of the US federal government's executive branch, and other senior executives from the Departments of Defense, Commerce, Energy, Justice, Transportation, and Treasury. It is designed to bridge the public and private sectors and enhance senior leaders understanding of how current and emerging technologies are impacting human decision making and operations in the information age.

Attendees study war fighting and doctrine as related to information warfare (IW) concepts and principles. Course objectives are to understand current DOD and joint doctrinal concepts for IW, understand the integration of weapons systems and IW capabilities from different services or nations to provide effective theater- and national-level IW capabilities, understand and respond to service perspectives on IW employment concepts, and understand IW's role in campaign development. Attendees should be able to execute theater IW strategy and understand IW capabilities and limitations. Attendance is limited to US flag officers in the grade of brigadier general or major general and equivalent members of the SES.

# MCADRE 002, Contingency Wartime Planning Course

The two-week CWPC educates airmen in grades E-5 through O-6 in the art and science of contingency war planning. The CWPC graduates approximately 650 students each year during their 10 courses. Quotas for attendance may be obtained through major command quota managers or by calling the CWPC at (334) 953-2638 or DSN 493-2638.

## **Curriculum Summary**

Area of Instruction	Academic Hours
Orientation and Testing	5.5
Exercises	23.0
Guest Speakers	7.0
Systems	4.0
Foundations of Planning	8.0
Planning	17.0
TOTAL	64.5

# MCADRE 003, Joint Doctrine Air Campaign Course

The JDACC prepares personnel from all services who have been designated, or may be designated, to serve on the staff of a JFACC. Participants gain in-depth familiarity with the fundamental concepts, principles, and doctrine required to develop and execute a joint or combined air campaign plan. Attendees are normally captains through colonels. AF active duty officers may obtain attendance quotas through the training management system. All others please contact the JDACC staff directly at (334) 953-7899 or DSN 493-7899 to obtain course attendance authorization. ANG and AFRes officers may attend the course when funded by their parent organizations.

# **Curriculum Summary**

Instructional Area	Academic Hours
Course Administration	2.0
Air Campaign Planning Fundamentals	24.5
Air Campaign Planning Process	5.5
Air Campaign Planning Exercise	38.0
TOTAL	70.0

# MCADRE 005, Information Warfare Applications Course

The IWAC is a one-week course that teaches students to apply and value the principles of IW to enhance war-fighting capabilities. The course is taught at the college level and is divided into three blocks of material: the Definition and Components of IW, the IW Operational Environment, and the Applications of IW. Through lectures, seminars, practical exercises, readings, and computer-based lessons, students gain a better understanding of how current and emerging technologies are affecting decision making. Classes are offered eight times per year, with an enrollment of 50 to 60 students per class.

**Curriculum Summary** 

Instructional Area	Academic Hours
Course Administration	1.0
Fundamentals of IW	27.0
Exercises	12.0
TOTAL	40.0

## **Aerospace Power Course**

The Aerospace Power Course is a self-paced, interactive course that uses a variety of state-of-the-art learning media. It consists of 11 separate lessons. The course helps students develop a broader comprehension of aerospace power principles, concepts, and applications through hybrid CD-ROM courseware and Internet connectivity along with reading material from the AU Press. The course contents better prepare AF officers in joint duty assignments to articulate and advocate aerospace power principles and beliefs, but can be beneficial to all aerospace power enthusiasts. Future plans call for using the Internet as a primary means of distribution. For more information, contact the Aerospace Power Course development team at apchelp@maxwell.af.mil.

# **Air Force Wargaming Institute**

Col William Mathis, Director

#### Internet Address

http://www.cadre.maxwell.af.mil/wargame/afwihome.htm

In 1975 the Clements Blue Ribbon Panel on Excellence in Professional Military Education cited a need for service schools to stress war fighting and decision making in combat. In 1976 the AF chief of staff's Constant Readiness Tasking directed AU to "put more war in the War College." The concept for the Air Force Wargaming Institute (AFWI) evolved from these two initiatives. The facility was opened in 1986 at Maxwell AFB, Alabama. The institute supports a broad range of war games and exercises to meet the needs of AF, DOD, and international sponsors.

# **Operations and Wargame Support**

AFWI is housed in a special-purpose, 56,000-square-foot facility. It can operate in whole or in part as a secure, classified working area. The building contains 22 seminar or game rooms and two conference rooms—all with audio and video capabilities.

The Wargaming Operations Division designs, develops, tests, and executes war games for AF, joint service, and international customers. During war games the staff performs Control, Friendly, and Opposing team functions. The division has extensive hands-on experience in airpower doctrine, strategy, and tactics. Through continuous research and interaction with various DOD agencies, this division is able to ensure that war games reflect accurate and credible friendly and opposing force play. It provides the entire spectrum of support necessary for a full war-gaming calendar—event services, protocol, audiovisual, and facility management.

The Information Technology Division maintains the communications-computer infrastructure supporting war-gaming operations as well as the rest of CADRE. The division designed and implemented state-of-the-art local area networks (LAN)—unclassified and classified—that can be modified to accommodate a wide spectrum of war-gaming scenarios. The division maintains these LANs and evaluates emerging technologies to ensure that AFWI's computing environment remains on the cutting edge. The division also develops, maintains, and operates models to support war games. AFWI is currently using the following models and tools:

- 1. Air Force Command Exercise System (ACES)—a joint, theater campaign-level, combat simulation model;
- 2. Joint Educational Mobility Model (JEMM)—a theater mobility model used to generate time-phased force and deployment data (TPFDD) for war games;
- 3. Atlantis model—a real-time, tactical aerospace employment model:
- 4. Bottom Line model, which simulates the impact of national budget decisions on the state of the nation;
- 5. Accelerated Combat Timeline (ACT)—an operational-level graphical user interface to the ACES model; and
- 6. ForceView—an automated map display tool that allows one to view and move forces. This tool is capable of interfacing with ACT, ACES, and JEMM.

The Operations Analysis Division provides technical advice and critical analyses on all aspects of modeling and simulation (M&S) and war gaming. The division's staff members hold advanced degrees in

operational sciences and have experience in weapons employment, mobility, space operations, and information operations. These operations analysts provide course management and platform instruction for the formal Prime Warrior Course, which prepares AF participants for joint M&S-supported activities (war games, exercises, and analyses). Teamed with the Air Force Doctrine Center, the division analyzes the logic, mathematics, and algorithms of combat models to ensure doctrinally sound outcomes at joint exercises.

## Wargames, Simulation Exercises, and Prime Warrior

In a typical year, AFWI plans, develops, and conducts more than 25 war games and exercises and six Prime Warrior courses for more than 6,000 participants. AFWI provides a "laboratory environment" in which current and future commanders and staffs study warfare to identify problems before they face them in combat.

**Prairie Warrior.** Prairie Warrior is a series of joint unclassified computer-assisted exercises held at the US Army's Command and General Staff College (CGSC) at Fort Leavenworth, Kansas. This series provides a valuable training and experimental venue for the CGSC student. Prairie Warrior is a high-visibility forum in which the AF can showcase doctrinal issues and demonstrate aerospace capabilities to the future leadership of the US Army.

**Crisis Decision Exercise (CDX).** CDX is the capstone exercise of AWC Joint Force Employment core curriculum. Utilizing a war game scenario, AWC students analyze a political and military crisis situation from the roles of the National Command Authorities (NCA) and Joint Chiefs of Staff. They formulate NCA-level decisions into operational-level guidance for JTF staffs.

**Aerospacex.** Aerospacex is a war game that provides ACSC students the opportunity to apply their knowledge of air campaign planning in running an air operations center (AOC). Students assume the role of the JFACC and staff. Each seminar plays against another seminar, utilizing AFWI's ACES model.

**Joint Warrior/Cold Roof.** Joint Warrior and Cold Roof are theater-level seminar war games conducted in conjunction with the JFOWC. They focus on issues associated with joint and coalition warfare from the perspective of the theater CINC and component commanders. Joint Warrior involves senior Air Force, Army, Marine, and Navy officers in deliberate planning. Cold Roof is a crisis action planning exercise.

**Pegasus-Canada.** Pegasus-Canada is a computer-assisted theater-level war game used by the Canadian Forces College (CFC). Participants assume the role of the combined command staffs of two opposing alliances.

**Pegasus-UK.** Pegasus-UK is a computer-assisted theater war game for the United Kingdom's Joint Services Command and Staff College. The exercise models a war between two fictional alliances. The participants assume the role of the staffs of the opposing alliances.

**Operation Atlantis.** Operation Atlantis is the SOS's capstone exercise. The exercise reinforces teachings of the principles of war, fundamentals of military force application, and basic concepts of tactical air operations. Students simulate operations from an AOC. They conduct battle staff planning for an air campaign in the combat plans section, then execute their plan in an interactive computer exercise.

**Blue Thunder.** Blue Thunder involves officers in the ABC in basic air operational and tactical warfare. It focuses on the employment of air forces, in concert with land and sea operations, at the operational and tactical levels of war. The officers apply the basic concepts of air campaign planning in a dynamic environment, which requires them to continually assess the effectiveness of their plan and make changes as required.

**Theater Campaign Warfare.** Theater Campaign Warfare (TCW) is the capstone war game for SAAS. The war game is augmented by students from the Army's School of Advanced Military Studies (SAMS) at Fort Leavenworth, Kansas; Naval War College (NAVWARCOL) at Newport, Rhode Island; and the USMC's School of Advanced Warfighting (SAW) at Quantico, Virginia. The game consists of planning and execution phases. Each team interprets national strategic guidance, develops a JFC's estimate, identifies possible courses of action (COA), performs an evaluative COA prioritization and selection, and executes their COA in a wartime scenario.

Joint Land, Aerospace, and Sea Simulation. The Joint Land, Aerospace, and Sea Simulation (JLASS) is the only jointly sponsored war-gaming exercise conducted by all the US military senior-level colleges—AWC, NAVWARCOL, Army War College, Marine War College, National War College, and Industrial College of the Armed Forces. The primary focus in JLASS is on joint and combined warfare at the operational and strategic level. Its goal is to enhance joint PME by examining potential US military responses to regional crises.

**Exercise in National Budgeting Priorities.** Exercise in National Budgeting Priorities (XNBP) is an executive planning exercise addressing national budget priorities. During the exercise students use the bottom line model to analyze the impact of presidential, economic, political, and military budget decisions on the state of the nation. XNBP allows participants to test their understanding of budgetary and economic relationships.

## **Prime Warrior Course**

The Prime Warrior course prepares AF personnel to take part in joint war games. The course surveys

- ? operations research, combat probability, and statistics;
- ? modeling and simulation, high- and low-resolution models and related practical exercises;
- ? measures of merit, scenarios, databases, and terrain;
- ? operational staff procedures and operational planning tools; and
- ? eight primary DOD simulations and four practical wargame exercises.

In addition, the students receive a review and update on doctrine and applications as well as hands-on training using real-world joint models.

# **Intelligence Directorate**

Col Michael L. Townes, Director

#### Internet Address

http://www.cadre.maxwell.af.mil/default.htm (select organization)

As AU's only intelligence organization, the Intelligence Directorate (IN) supports the AU commander, AU schools' commandants, staffs and students, the Air Force Doctrine Center (AFDC), CADRE, and 42d Air Base Wing by providing ISR expertise. Products include curriculum development, platform lectures/instruction, current intelligence presentations and analysis, as well as scenario development, opposing force, and ISR play in support of war games.

The directorate's personnel provide current and projected force structures of nations (scenario development) represented in war games. These games simulate the capabilities and tactics of opposing forces and represent the role intelligence plays in national- and operational-level decision making. The directorate provides intelligence research assistance and resources to more than 7,000 students and 200 faculty members at AU, many of whom participate in special studies directed by the Air Force Chief of Staff and the Air Staff. The directorate supports AWC, ACSC, CPD, SOC, ABC, and OTS through intelligence briefings and academic course work (intelligence education).

The directorate reviews and critiques joint and AF doctrine documents to ensure intelligence capabilities are accurately represented. IN also provides intelligence instruction to CADRE's JDACC, IWAC, JFOWC, and JFACC. As senior intelligence officer (SIO) for AU, the director maintains regular liaison with Air Force Director of Intelligence, Surveillance and Reconnaissance (AF/XOI) and fellow AF senior intelligence officers and chairs the AU Intelligence Curriculum Committee.

The AU Special Security Office (AU/SSO) controls, safeguards, and ensures proper use of sensitive compartmented information (SCI). The SSO manages more than 900 SCI billets, operates AU's only SCI communications center, and provides physical security for the AU SCI facilities.

## **US Air Force Public Affairs Center of Excellence**

Col David Sims, Director

Internet Address
http://www.cadre.maxwell.pace.af.mil

The US Air Force Public Affairs Center of Excellence (PACE) is CADRE's newest directorate, established in October 1998. The center assists students in conducting research on public affairs and mass communications issues, analyzes case studies, and promulgates information operations and public affairs doctrine throughout the AF. PACE instructors also cooperate with schools and organizations in developing military-news media curricula. The center develops and teaches selected courses at AU to prepare future military leaders to interact with US and allied audiences through the news media. The center's staff participates in many war games and simulation exercises at AU to introduce military-news media interactions into the game and exercise scenarios.

# IRA C. EAKER COLLEGE FOR PROFESSIONAL DEVELOPMENT

Col Aaron B. "Buck" Rogers, Commander

#### Internet Address

http://www.maxwell.af.mil/au/cpd/

**Mission:** To provide world-class professional continuing education and technical training to Air Force, international, and other DOD personnel.

The Air University Center for Professional Development was activated on 1 August 1986. This organization was formed by merging the Leadership and Management Development Center and the Educational Development Center. In October 1993, the center was redesignated the Ira C. Eaker College for Professional Development (CPD) to honor General Eaker's significant contributions to the advancement of aviation, to the Air Force, and to the continuing professional development of its members.

The CPD umbrella spans eight schools: Commanders Professional Development School, Air Force Human Resource Management School, International Officers School, Air Force Judge Advocate General School, DOD Professional Military Comptroller School, USAF Chaplain Service Institute, USAF First Sergeant Academy, and USAF Historian Development School.

#### Goals:

- ? Ninety percent of students, graduates, and graduates' supervisors stating our courses accomplished their stated mission
- ? Quality of instruction, course effectiveness, and overall value of each course rated "Excellent" or higher by 90 percent of students, graduates, and graduates' supervisors.
- ? Reward our top performers by nominating them for CPD, AU, AETC, and Air Force-level awards.
- ? Appropriately discipline those who cannot or will not meet standards.

#### **Academic Credit**

The Ira C. Eaker College for Professional Development is affiliated with the CCAF. Through this relationship, CPD is—for accreditation and

degree purposes—a CCAF educational associate. CPD course offerings for enlisted personnel result in the award of academic credit by CCAF. Enlisted graduates may apply for course credit through the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. The Commission on Educational Credit of the American Council on Education endorses several CPD courses for college-level credit recommendations.

# **Commanders Professional Development School**

Col John J. Lauten. Director

Internet address
http://www.maxwell.af.mil/au/cpd/

The Commanders School conducts six courses—the USAF Wing Commanders Seminar, the USAF Support Group Commanders Course, the USAF Logistics Group Commanders Course, the USAF Medical Group Commanders Course, the USAF Operations Group Commanders Course, and the USAF On-Scene Commanders Course.

Attendance at the wing and group commanders' courses is mandatory for individuals identified by the USAF Command Selection Board. These courses are tailored to provide attendees current information on DOD and AF leadership and management issues. The chief of staff of the Air Force approves the curriculum. Adjunct faculty and senior subject matter experts from DOD, Air Staff, MAJCOMs, and field operating agencies present the course material.

The four group commanders' courses are two weeks in duration and are held concurrently. The first week the courses are combined and students receive a core curriculum that applies to all group commanders. The second week the four courses are divided into discipline-specific seminars.

Attendance at the On-Scene Commanders Course is mandatory for all USAF personnel designated as on-scene commanders and senior installation fire officials. The course is optional for disaster response force representatives, command inspector general team chiefs, and installation exercise evaluation team chiefs/members. Resident and adjunct faculty teach personnel how to properly conduct disaster responses (aircraft accidents, hazardous material incidents, tornadoes, etc.), save lives and resources, and limit damage to the environment.

**Mission:** Prepare officers for duty as wing commanders, logistics group commanders, medical group commanders, operations group commanders, support group commanders, and emergency response on-scene commanders. The school's faculty develops, schedules, and conducts tailored courses that help attendees deal with critical leadership and management issues.

**Goals:** Provide AF wing, group, and on-scene commanders with a better understanding of the environment, responsibilities, and resources required to enhance their effectiveness as commanders.

Through executive-level short courses, the school provides AF officers selected for command with

- ? updates on critical issues affecting themselves, their people, and their mission:
- ? specific training concerning command responsibility, accountability, and discipline; and
- ? practical skills that may be used to enhance their immediate effectiveness as new commanders.

# **Duration and Quota**

The courses convene up to five times each year with 15–20 attendees. The On-Scene Commanders Course is the exception, convening 15 times each year at Maxwell and 13 times each year at other selected locations.

# **Prerequisites and Selection**

The courses are open to individuals selected to serve in the positions described by the courses. The Air Force Colonels Matters Office (AF/DPO) manages attendance at the wing and group commanders' courses.

# **Curriculum Summary**

Course Title	Academic Hours
Wing Commanders Seminar	43.0
Support Group Commanders Course	78.5
Logistics Group Commanders Course	79.0
Medical Group Commanders Course	87.0
Operations Group Commanders	
Course	80.0
On-Scene Commanders Course	32.0

# **Initiatives Summary**

The Commanders Professional Development School collaborates with the Air Staff, major air commands, and other AF organizations to further customize its curricula for commanders. This effort enables the school to better serve as a lever for implementing current AF policy.

# **Air Force Human Resource Management School**

Col Kenneth M. Parsons. Director

# Internet address http://www.maxwell.af.mil/au/cpd/

The Air Force Human Resource Management School (AFHRMS) was established at Maxwell AFB in 1965 as the Air Force Professional Personnel Management School. The school began with one course, the Professional Personnel Management Course. In July 1977, the school absorbed the former Civilian Personnel School located at what was then Gunter AFB. The Civilian Personnel School, originally established in 1948 at Kelly AFB, Texas, was moved to Gunter in 1968.

In 1983 the school was renamed the Air Force Professional Manpower and Personnel Management School to reflect more closely the merger of manpower and personnel functions at Headquarters USAF, the Air Force Manpower and Personnel Center (as it was then designated), and the major air commands. While the close organizational links between manpower and personnel functions were severed at most headquarters levels in 1985, the school nonetheless retained a manpower element in both name and curriculum.

In 1988 the school expanded the curriculum to address PCE requirements in the Air Force Family Matters Program. In 1993 recognizing the broad range of human resource activities represented in its curriculum, the school adopted its current name. Also, in concert with the Office of the Chief of Staff's 1992 Year of Training initiatives and requirements, the school introduced the Advanced Personnel Officer Course. In 1996 the Professional Manpower and Staff Officer Course was added to the school's PCE offerings. However, the course was revised in 1997 as the Manpower and Quality Staff Officer Course to reflect the merging of the manpower and quality communities. In 1999 the course was renamed the Manpower and Staff Officer Course. Also in 1999, the school activated the Wing Manpower and Organization (MO) Chief Course in an effort to provide knowledge and skills to help wing MO chiefs effectively execute their roles and responsibilities. This course filled a crucial void, as there was previously no AF training program specifically targeted to this important segment of the manpower career field.

**Mission:** Provide world-class professional continuing education for the competence and professional development of human resource managers and family matters specialists.

**Goals:** Enable participants to apply state-of-the-art technologies and methods in human resource management within their organizations while emphasizing the core value, excellence in all we do. The school continually revises the curriculum to ensure course offerings meet the changing needs of customers. In this regard, the school's customers include the students, commanders and directors who employ the graduates, and Air Staff functional managers who have oversight of the career fields from which students are drawn.

The school provides the faculty with continual opportunities to develop their professional and educational credentials. Faculty members are expected to stay abreast of changing policy and practice in their areas of professional expertise.

The school also upgrades classrooms and other facilities and equipment to provide an environment conducive to learning. Guest instructors and lecturers, used heavily throughout the curriculum, are carefully selected based on presentation skills or responsibility for critical policy issues.

Commensurate with an educational mission, each course presents a carefully selected mix of theory, current policy, and instruction in practical skills. Whenever practicable, learning is developed experientially through student participation in exercises, case studies, simulations, and individual or group projects.

## **Initiatives Summary**

The school added the Mission Support Squadron Leadership Course (MSSLC) and the Military Personnel Flight Leadership Course (MPFLC) to replace the Advanced Personnel Officers Course (APOC). These two courses were designed to focus on the unique challenges of MSS and MPF leaders with an understanding that many crossover commanders have limited MSS or MPF experience

Because of the current downsizing, the search for economies, and the centralization of many policy and program responsibilities, the Air Force Human Resource Management School is involved in a number of important initiatives. The implementation of Palace Compass will centralize civilian personnel processes and reorganize/downsize civilian personnel flights. As a result, several new civilian personnel courses were developed to support the concept of "multiskilling" (competency in two or more of the traditional subdisciplines of the profession). These courses were developed through close cooperation with Air Staff civilian personnel managers in anticipation of the direction toward smaller staffs and more integrated operations in local civilian personnel flights. Single subdiscipline courses were also retained in the curriculum to meet customer needs.

The school also added a labor relations course to incorporate the content of three labor-related courses previously offered and to include aspects of the president's executive order mandating union-management partnerships. The school developed a resource management course to teach civilian pay manage-to-budget concepts to responsible personnel from the manpower, financial management, and civilian personnel communities. The school developed a course that teaches civilian personnel specialist their role in the competitive sourcing and privatization (CS&P) process. Students and the functional office of primary responsibility (OPR) on the Air Staff have strongly endorsed the courses.

Because recent AF evaluations of the civilian personnel function have shown that some critical skills are lacking in key functional areas, the school has also been asked to develop intermediate courses that bridge the gap between basic skills gained through computer based instruction (CBI) and advanced courses. To that end, two new intermediate courses are being added to the curriculum.

The school has initiated a joint project with the Air Force Institute for Advanced Distributed Learning (AFIADL) to transfer its fundamental civilian personnel courses to a CBI format. Five courses have been transferred to CBI. This endeavor will result in significant cost savings when compared to resident courses. Adding significantly to this effort is the conversion of two courses (Military Personnel Management Course and the USAF Supervisors Course) from hard copy to CD-ROM in interactive format.

Through these initiatives, the school has better postured itself to meet the needs of customers to have training immediately available on an "as needed/when needed" basis, rather than having to wait for a resident course. In response to a secretary of the Air Force direction to expand the education of AF officials on alternate dispute resolution (ADR) methods, the school has developed basic and advanced mediation.

The school will continue to be heavily involved in the effort to educate and train family matters specialists to assist in taking care of AF people and their families. A new course to enhance family readiness has been launched to provide qualification training for a newly authorized position in family support centers. Further, the qualification course for family support center directors and deputy directors is being extensively revised to assist these officials in supporting the AF mission as deployments and force structure changes challenge AF members and their families.

Portions of these courses will later be converted to computer-based training. Completion of the computer-based portions of the course will be required before attending the resident course. These initiatives will help the school meet the challenges of continuing to offer quality programs in a rapidly changing environment under tight manpower and budget restraints.

# **Duration and Quota**

The courses vary in length from five days to three weeks.

# **Prerequisites and Selection**

The requirements for participants vary for each course.

#### **Course Summaries**

	Academic
Course Title	Hours
Civilian Personnel Officer Course	60.0
Position Classification Course	67.0
Intermediate Position Classification Course	67.0
Position Classification Advanced Course	62.0
Affirmative Employment Course	67.0
Intermediate Affirmative Employment Course	67.0
Employee Development Specialist Course	47.0
Employee Development Advanced Course	52.0
Employee-Management Relations Course	67.0

	Academic
Course Title	Hours
Employee-Management Relations Advanced Course	67.0
Affirmative Employment Advanced Course	62.0
Systems Manager Course	40.0
Advanced Systems Manager Course	40.0
Resource Management Course	38.0
Competitive Sourcing and Privatization Course	38.0
Chief EEO Counselor Course	40.0
Labor-Management Relations Course	58.0
Multi-Functional Specialist Course	103.0
Principles of Civilian Personnel Management	130.0
Civilian Personnel Management Course	41.5
Elements of Civilian Personnel Administration	56.0
Military Personnel Flight Leadership Course	37.0
Mission Support Squadron Leadership Course	37.0
Family Support Center Manager Qualification Course	40.0
Family Support Center Readiness Qualification Course	40.0
Manpower Staff Officer Course	121.0
Wing Manpower and Organization Chief Course	37.0

#### **Academic Credit**

Over the years, the Commission on Higher Educational Credit of the American Council on Education has endorsed credit recommendations for the Advanced Personnel Officer Course. In 1999 ACE reevaluated the course and recommended six semester hours graduate credit in Human Resource Management. ACE also recommends three semester hours graduate credit for the Manpower Staff Officer Course. Students desiring credit should request that the Registrar, Air University, AU/CFRR, 60 W. Shumacher Ave., Maxwell AFB, AL 36112-6337, send a transcript to the college or university where they are enrolled.

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the Family Support Manager Qualification Course and the Family Support Center Readiness Qualification Course, who are enrolled in CCAF, receive two hours of credit, respectively, toward an associate degree. Course graduates may apply for credit through the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. For further information, see the CCAF catalog available in your base education services office.

## **International Officer School**

Lt Col Robert B. Kane, Acting Director

Internet address
www.au.af.mil/au/cpd/ios/ios.htm

The International Officer School was established in 1954 as the Allied Officer Preparatory School. Since then 9,123 international military students from 131 countries have completed the program. The school conducts five classes each year. These classes are six-week courses to prepare international officers for attendance at AWC, ACSC, or SOS.

The preparatory courses improve the ability of students to express their ideas clearly (in both speaking and writing) and to read and comprehend written and spoken materials used in AU classes. A program of planned classroom activities, informational trips, and a civilian sponsorship program (called Alabama Goodwill Ambassadors) introduces students to the political, military, and socioeconomic aspects of American culture. This orientation enables students to adjust more readily to the USAF and civilian communities. Academic requirements for each course are geared specifically to the PME school the students will attend.

The IOS Operations Division functions as the International Student Military Office and provides administrative support to all international students attending any AU School.

**Mission:** Educate and support international officers and their families. Manage international programs enabling AU to accomplish US security assistance objectives, support USAF international involvement, and build lasting international military relationships.

**Goals:** Expand the capacity of international officers to participate more effectively in military education and duty assignments.

**Objectives:** This course develops an

- ? appreciation of American society, institutions, and ideals;
- ? awareness of the mission and organization of US military forces and US military terminology;
- ? ability to speak and understand American English (SOS, ACSC, and AWC only);

- ? awareness of the organizational structure, curriculum content, and instructional methods employed in AU schools (SOS, ACSC, and AWC only); and
- ? an ability to participate in physical training activities (SOS, ACSC, and AWC only).

# **Initiatives Summary**

Believing that the school's vitality demands change and innovation, ongoing research is an integral part of the faculty's responsibility. Research—ranging from instructional methodology to cross-cultural communications—identifies academic subject areas, lesson formats, and instructional techniques required for the curricula. Such research and the resulting innovations enhance student learning and the achievement of school objectives. Examples of improvements are the continuing expansion of the interactive videodisc, computer-assisted instruction laboratory, and the formalization of language training to provide integrated American English instruction with other curriculum topics.

#### Curriculum

The school's curriculum consists essentially of preparatory courses that have three basic functions. First, they provide curriculum orientations to follow-on school topics and methodologies. Second, they serve as periods of cultural adjustment for international officers and their families. Third, they accomplish the administrative requirements and informational program objectives outlined in international military training management directives. Attendance at IOS is a prerequisite for international officers attending SOS, ACSC, and AWC. International students coming to AU for the ACSC and AWC should preview *Air University Catalog* for the relevant master's degree, accreditation, degree granting-authority, and eligibility requirements spelled out in the descriptions of each school in this catalog.

# **Duration and Quota**

Course titles, duration, and student quotas for each class are as follows:

Course Title	Duration	Quota
IOS/SOS (3 classes)	6 weeks	32
IOS/ACSC	6 weeks	80
IOS/AWC	6 weeks	40

# **Prerequisites and Selection**

IOS/SOS and IOS/ACSC require an English comprehension-level (ECL) test score of 70 while IOS/AWC requires an ECL test score of 80. Students are also expected to meet certain physical standards outlined in the *Air Force Education and Training Course Announcements*, formerly AFCAT 36-2223, *USAF Formal Schools*.

#### **Course Areas**

Each course includes the following phases.

**Student Administration.** During this phase of the course international officers in-process are to receive tours and briefings about Maxwell AFB and Montgomery. They receive orientations in various aspects of the individual IOS courses. This area includes welcome and graduation ceremonies, curriculum and schedule briefings, and a tour of the AU Library. Students participate in formal, structured feedback conferences with instructors; informal conferences take place throughout the courses as needed.

**Informational Program.** The Informational Program provides opportunities for students to gain a better understanding of US ideals, institutions, and culture. Some of the topics included are the American way of life, education in the United States, US government institutions, and the US news media. A significant portion of this program is devoted to human rights and related training in keeping with State and Defense Department objectives for security assistance training. Field trips and tours are conducted in the Montgomery area, Southeast Region, and to Washington, D.C.

**Communications Development.** Communications Development constitutes a significant portion of the instruction at IOS. It includes English enhancement instruction designed to increase the student's ability to speak and understand American English and communicate ideas both orally and in writing.

In addition, basic writing and briefing instruction, with application exercises, is provided based on the PME follow-on school's communication techniques. This area also includes computer instruction

with hands-on training in applications appropriate to the specific followon PME school.

**Military Studies.** The Military Studies area introduces the students to the mission, organization, policies, concepts, and terminology of the US military.

**Leadership.** Students are provided an introduction to various leadership concepts and models. Again, the instruction is geared at a level appropriate to the follow-on PME school. This area also introduces the physical training requirements of the follow-on PME school with emphasis on field leadership and teamwork—particularly important for students preparing to attend SOS.

#### **Curriculum Summaries**

Squadron Officer School Course

Instructional Area	Academic Hours
Student Administration	18.0
Informational Program	56.5
Communication Development	84.5
Military Studies	6.0
Leadership	38.0
TOTAL	203.0

# Air Command and Staff College Course

Instructional Area	Academic Hours
Student Administration	15.0
Informational Program	81.0
Communication Development	87.0
Military Studies	25.0
Leadership	1.0
TOTAL	209.0

# Air War College Course

	Academic
Instructional Area	Hours
Student Administration	20.0
Informational Program	71.9
Communication Development	79.0
Military Studies	29.0
Leadership	4.0
TOTAL	203.9

# Other Programs

IOS conducts several nonacademic programs to enhance the experience and education of international officers and their families.

**Alabama Goodwill Ambassadors.** Alabama Goodwill Ambassadors is the AU official sponsorship program for international students and their families. This program makes the international students and their families feel welcome and acquaints them with aspects of American culture that they may not otherwise be exposed to through their formal AU courses and activities.

**International Family Loan Program.** This program lends international students and their families (for a nominal fee) such essential household items as dishes and utensils. This service relieves students of the need to spend large sums of money on items they would discard before leaving AU.

**International Family Orientation Program.** This two-week family orientation course is conducted each summer for the wives and children of the international officers who will attend ACSC and AWC. The course provides an orientation to American culture and to the Montgomery public school system. When possible, limited English language instruction is provided. Many recreational activities are also conducted for the children.

**Air University International Honor Roll.** This honor roll recognizes international graduates of AU PME courses who have gone on to become heads of service, ministers of defense, heads of state, or other high-level officials within their own countries.

**International Wives English Course**. This six-week course, conducted each fall or winter, provides conversational English skills that spouses and adult children of international officer students will need in their day-to-day activities.

# **Air Force Judge Advocate General School**

Col Bruce T. Brown. Commandant

Internet address
http://www.maxwell.af.mil/au/cpd/jagschool

The Air Force Judge Advocate General (AFJAG) School was established in 1950 at Maxwell AFB. The school went through an inactive period in the 1960s before becoming part of the Institute of

Professional Development, the predecessor of the Ira C. Eaker College for Professional Development, in 1969. The initial charter of the AFJAG School was to teach military law to new AF judge advocates. That charter has expanded substantially as the school now conducts many advanced and specialized courses. The school currently offers 32 different resident and nonresident courses in 45 offerings.

The annual student body of some 3,600 consists of a selected group of active duty, AFRes, and ANG judge advocates, paralegals, and civilian attorneys from the Air Force, the other armed services, and many federal agencies.

The AFJAG School faculty also provides instruction on legal subjects to students attending AWC, ACSC, SOC, AFSNCOA, IOS, ABC, other CPD schools, and other AU colleges and schools.

The AFJAG School performs several other educational functions including administering the Judge Advocate General Department's continuing legal education (CLE) program for AF attorneys; publishing *The Air Force Law Review* (semiannually), the Air Force legal magazine *The Reporter* (quarterly), and *The Military Commander and the Law* (biannually); and teaching principles of American constitutional democracy, military justice, and human rights to foreign military officers and civilians through the Expanded International Military Education and Training Program.

**Mission and Goals:** The AFJAG School provides high-quality and relevant education for judge advocates, civilian attorneys, and paralegals to meet the needs of the Air Force. The school's formal and CLE courses contribute to the professional development of judge advocates, civilian attorneys, and paralegals. Courses of study broaden and refine the students' understanding of the complexities of military legal practice. Graduates will have the ability to analyze and comprehend

- ? foundations of military law and basic advocacy skills;
- ? management and leadership skills necessary to supervise a base legal office;
- ? the methods and techniques used in courtroom advocacy and specialized handling of expert witnesses, forensic evidence, complex evidentiary issues, and demonstrative evidence;
- ? the principles of civilian personnel management and litigation;
- ? the principles and concepts of federal and state environmental law and DOD procedures for compliance;
- ? the principles of international military operations, the law of armed conflict, and rules of engagement;
- ? the principles and concepts of claims and tort litigation;
- ? basic information on federal tax laws, estate planning, and the administration of a full-service tax program; and

? technical issues encountered in dealing with the systems acquisition process.

# **Initiatives Summary**

The AFJAG School has adopted several initiatives based on research studies, technological innovations, and other creative curriculum developments to enhance the ability of graduates to perform their professional duties. These initiatives include

- ? integrating more hands-on practical procedure exercises into each course,
- ? creating mentoring opportunities for faculty and students in resident courses,
- ? integrating distance learning methodologies and the latest information technology advances into all courses and publications, and
- ? adding specialized and updated courses to meet the increasing needs of new AF missions and of attorneys and paralegals in the field.

The AFJAG School Symposium Program hosts two symposia each year to strengthen the bonds and mutual understanding between the American military and civilian society and enhance the education of AF legal practitioners about cutting-edge legal, social, and policy issues affecting both American society and the armed forces.

#### **Resident Curriculum**

The academic environment of the AFJAG School encourages free expression of ideas and an opportunity for independent and analytical thinking. The resident curriculum fosters advanced learning in the areas of advocacy, environmental law, labor law, and law office leadership and management so that judge advocates and paralegals can ensure that the best legal service and advice are provided to AF commanders, staff agencies, and personnel.

**Duration and Quota.** Frequency of presentation, length, and number of students varies for each course. Contact the AFJAG School or its Internet home page for specific information.

**Prerequisites and Selection.** Requirements vary for each course.

# **Curriculum Summary**

	Academic
Course Title	Hours
Judge Advocate Staff Officer Course	337.50
Staff Judge Advocate Course	85.00
Reserve Forces Judge Advocate Course	35.75
Air Force Reserve Annual Survey of the Law	24.00
Air National Guard Annual Survey of the Law	24.00
Deployed Air Reserve Components Operations and Law Course	20.00
Military Judges Seminar	32.00
Law Office Managers Course	81.90
Claims and Tort Litigation Course	56.00
Federal Employee Labor Law Course	35.00
Advanced Labor and Employment Law Course	20.00
Environmental Law Course	33.70
Trial and Defense Advocacy Course	44.00
Advanced Trial Advocacy Course	38.00
Operations Law Course	69.75
Advanced Environmental Law Course	19.00
Environmental Law Update Course	19.50
International Law Course	18.50
Federal Income Tax Law Course	41.00
Legal Aspects of Information Operations Course	24.00
Aircraft Accident Investigation Board Legal Advisor Course	24.00
Military Justice Administration Workshop	36.00
Paralegal Apprentice Course	248.00
Paralegal Craftsman Course	240.00
Reserve Forces Paralegal Course	80.00
Fiscal and Appropriations Law Course (teleseminar)	28.00
Air Force Systems and Logistics Contracting Course	
(teleseminar)	32.50
Deployed Fiscal Law and Contingency Contracting Course	24.00
Information Operations Law Course	36.00
Negotiation and Appropriate Dispute Resolution Course	32.50

# **Enrichment Offerings**

These programs are designed to help AF attorneys and paralegals update and refresh their skills in several areas. State CLE credit is not offered for these tapes. They give attorneys and paralegals who are unable to attend resident courses the opportunity to benefit from some of the AFJAG School's best presentations. The enrichment tapes may be ordered by contacting the CLE director.

These tapes include discussions, presentations, and lectures on specific subjects in the areas of criminal law, trial advocacy, environmental law, labor law, and federal claims and tort litigation. Paralegal enrichment offerings include subjects in the areas of claims and tort litigation and in the law officer managers' course.

#### **Nonresident Curriculum**

The AFJAG School utilizes a number of distance learning methodologies to provide nonresident students with advanced training and education in specialized legal areas. The school currently has the following nonresident courses and tapes available for CLE credit. Note that the specific number of credit hours allowed for each course sometimes varies with each state. You should contact the AFJAG School CLE director (CPD/JAC, 150 Chennault Circle, Maxwell AFB, AL 36112-6418, DSN 493-2802, or see the school's Internet home page) to determine how many hours each state allows and also to order any of the courses or tapes.

**Curriculum Summary** 

Course Title	Academic Hours
International Law	4
Professional Responsibility (Ethics) for Air Force Lawyers	3

#### **Academic Credit**

The AFJAG School offers two types of CLE: credit and enrichment. CLE credit can be earned by participating in programs counting toward state minimum CLE requirements. The school obtains state approval for three categories of CLE credit: resident courses taught at the AFJAG School; nonresident teleseminar or video courses prepared by the AFJAG School and broadcast or distributed on request; and conferences, workshops, and seminars conducted by various offices in the Air Force Office of the Judge Advocate General. The nonresident video courses consist of reading materials (syllabus), a videotape presentation, and seminar questions. This format is designed to take advantage of local expertise by using those individuals as discussion leaders. Credit can be obtained for conferences, workshops, and seminars on a case-by-case basis. You should contact the CLE director at least 30 days in advance of the date of the session.

Although the AFJAG School serves as a liaison with state bars in obtaining approval for CLE credit programs, the main goal remains that

of providing meaningful legal education to judge advocates who need an update in a certain area or are moving to a new position and are unable to attend the appropriate resident course. With this goal in mind, the AFJAG School offers enrichment programs that do not include any written materials. These offerings are designed to provide a wide variety of information, from particulars for the practitioner to advanced discussions on recent legal issues. The nucleus of these noncredit enrichment programs is a collection of lectures from various resident specialized courses.

Through this dual system of credit and enrichment programs, the AFJAG School is committed to providing the Judge Advocate General's Department with advanced legal education that responds to the department's training and educational needs. This CLE ensures that judge advocates and paralegals have the tools to do their jobs professionally.

For formal nonresident CLE credit, the senior installation staff judge advocate certifies course completion in writing to the AFJAG School CLE administrator, and the administrator then certifies course completion with the appropriate state.

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the Paralegal Craftsman Course (10 hours), Paralegal Apprentice Course (12 hours), and the Law Office Managers Course (four hours) who are enrolled in CCAF may receive the annotated number of semester hours of credit toward an associate degree. Course graduates may apply for credit through the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. For further information, see the CCAF catalog in your base education services office.

# **DOD Professional Military Comptroller School**

Col Edwin R. Newcome. Director

Internet Address www.maxwell.af.mil/au/cpd

In 1966, the assistant secretary of the Air Force (financial management) established a joint service task group to study financial management education in the Department of Defense (MEDOD). This group issued its report, called the MEDOD study, in March 1967.

In 1968 the Professional Military Comptroller Course (PMCC) was developed in response to this study. In 1973 financial managers from Army, Navy, and other DOD agencies began participating in PMCC; and

the Army and Navy began assigning highly qualified officers to the faculty. Then in 1977 the PMCC became the DOD Professional Military Comptroller School (PMCS).

**Mission:** Provide a graduate-level education program in comptrollership for midlevel and senior DOD financial managers. The school

- ? develops the individual's ability to adapt the financial management and comptroller's role to the *economic*, *political*, and *technical environment* impacting DOD;
- ? promotes comprehension of *issues* and *policies* affecting defense financial management and military readiness;
- ? expands awareness of and promotes appreciation for the diverse *financial management disciplines* within DOD; and
- ? encourages personnal growth in the areas of *wellness*, *communication*, and *leadership*.

**Goal:** The DOD PMCS is best articulated through its vision. Taught at the graduate level, the school's vision is *to improve accountability and fiscal readiness of DOD personnel by providing world-class financial management education.* It seeks to expand the students' capacity to adapt their role to the economic, political, and technical environments affecting military organizations—with a continuous focus on the primary mission of supporting the commander and war fighter.

# **Initiatives Summary**

The DOD PMCS has expanded its student executive communication, wellness, and personal computer programs, as well as begun exposing students to the new Defense Financial Management Certification program. The school is working with the American Society of Military Comptrollers to offer certification-testing opportunities at Maxwell AFB beginning mid-FY 2002.

# **Student Research Programs**

One of the prerequisites for graduation is the successful completion of an individual research paper. This paper must address a current Army, Navy, Air Force, Marine Corps, DOD, or other federal agency comptroller or resource management issue. The paper provides students an opportunity to examine a current topic from an analytical perspective. Final papers often go directly to service headquarters or

other top organizational levels for review and possible publication in professional journals

Students conduct individual research under the guidance of a faculty research advisor. Through their research efforts, students have the opportunity to enhance their professional competence and to make meaningful contributions to subjects relevant to DOD resource management.

### **Total Personal Wellness**

The DOD PMCS provides a total personal wellness program for the benefit of the students. This program includes blood cholesterol analysis, blood pressure check, nutrition, stress management, type A behavior, and exercise. It focuses on students identifying potentially unhealthy lifestyle habits in order to effect changes that will improve their overall wellness.

# **Personal Computer Support**

The DOD PMCS provides its students with access to state-of-the-art tabletop and laptop computers. Each seminar room has one tabletop computer that provides Internet, shared E-mail, and printer capabilities for the students assigned to that seminar. These computers can be used to conduct research, complete student research papers, prepare visual aids for student oral presentations, participate in computer-based resource management exercises, and communicate with home-station personnel. Each student also has the opportunity to hand-receipt for a laptop computer for his or her use while attending PMCS. While these computers are not configured for Internet and E-mail access, they do provide students the ability to work on research papers and oral presentations from the comfort of their own individual living quarters.

#### Curriculum

The curriculum consists of two courses. First is the DOD PMCC, which provides mid-to-senior level comptrollers, resource managers, and other financial staff with information concerning the tasks, environments, and skills associated with military comptrollership. Second is the Reserve Forces Professional Military Comptroller Course that provides selected Guard and Reserve officers with the same information from a Reserve forces perspective.

# **Duration and Quota**

The DOD PMCC is held five times each year meeting for 30 class days. The quota for each class is 60 students.

The Reserve Forces DOD PMCC is held once a year and meets for 10 class days. It also has a quota of 60 students.

# **Prerequisites and Selection**

The DOD PMCC is typically open to majors through colonels (or Navy equivalent) and GS-12s through GS/GM-15s serving in a financial management discipline. The Reserve Forces course is open to Guard and Reserve majors through colonels (or Navy equivalent) and GS-12s through GS/GM-15s serving in financial management disciplines. For both courses, students come from the Air Force, Army, Navy, Marine Corps, Defense Finance and Accounting Service, and other DOD agencies. Additionally, on a case-by-case basis the school will grant waivers for captains and GS-11s if space permits and time in grade, experience, and chain-of-command endorsements indicate the individual is capable of successfully completing the course.

**Curriculum Summary** 

	Academic
Course Title	Hours
Professional Military Comptroller Course	240.0
Reserve Forces Professional Military Comptroller	
Course	82.5

### **Academic Credit**

The Center for Adult Learning and Educational Credentials of the American Council on Education recommends three graduate semester hours in managerial accounting or public finance and three graduate semester hours in organizational management or managerial economics credit for the DOD PMCC.

Students desiring credit for attendance should request that the Registrar, Air University, AU/CFR, 60 W. Shumacher Ave., Maxwell AFB, AL 36112-6337, send a transcript to the college or university where they are enrolled.

# **USAF Chaplain Service Institute**

Chaplain (Col) Stephen Frick, Director

Internet Address
www.usafhc.af.mil

On 1 July 1953, when the Air Force was given responsibility of training its own chaplains, the United States Air Force Chaplains Course was established at Lackland AFB, Texas, and placed under the Officer Basic Military Course. The Chaplains Course became part of Officer Military Schools (OMS) in June 1955. Based on a Department of the Air Force authorization, the USAF Chaplain School was established in June 1960; however, it remained under OMS. From 1958 to 1965, judge advocates also reported to the Chaplain School for training. OMS was discontinued in July 1962 and was assigned to OTS. The Chaplain School was made a separate unit and was placed directly under the commandant, Lackland Military Training Center, in February 1965. USAF Chaplain School was established at Maxwell AFB and assigned to Headquarters Air University on 20 May 1966.

The chaplain service has a rich and varied legacy of supplying resources in support of ministry. The USAF Chaplain Service Resource Board was formed in July 1959 under the AU Command Chaplain. Initially called the USAF Chaplain Writers Board, it prepared written lectures and identified audiovisual resources for the Air Force Moral Leadership Program.

In 1976 the board's name was changed to USAF Chaplain Resource Board to reflect its central role and mission in developing a variety of ministry support resources. In January 1989 the word *service* was added to the board's name—USAF Chaplain Service Resource Board—to reflect the mission of providing resources to *all* chaplain service professionals: chaplain assistants, religious education coordinators, laity, and chaplains.

It is now known as the Chaplain Service Institute Resource Division. Its members assess the needs of chaplain service personnel and provide support to the varied ministries of the service. This support facilitates the free exercise of diverse religious practices and beliefs worldwide.

The USAF Chaplain Service Institute (CSI) was activated under the Ira C. Eaker Center for Professional Development on 31 October 1992. It provides the chief of the AF chaplain service with a centrally managed, centrally located complex for all education, technical training, research, and resourcing activities of the USAF chaplain service. The new organization consolidated and functionally integrated four separate organizations. Two elements of the institute, the USAF Chaplain School and the USAF Chaplain Service Resource Board, were already located at

Maxwell AFB. The USAF Chaplain Service Film Library, previously located at Norton AFB, California, as an operating detachment of the Center for Professional Development, collocated with the institute at Maxwell AFB in December 1992. Technical training for enlisted chaplain assistants was transferred to Maxwell in September 1993 from Keesler AFB, Mississippi, under Air Force Year of Training initiatives.

The creation of the USAF CSI was a hallmark in the tradition of the USAF chaplain service profession. Its goals are to more effectively enable the ministries of the USAF chaplain services and thus enrich the lives of AF members and their families.

The USAF CSI is composed of active duty, Reserve, and ANG chaplains, and chaplain assistants. This composition lends itself to a close collegial relationship with students and staffs worldwide and ensures curriculum and resources are designed and organized to solve and explore practical issues concerning today's AF chaplain service members.

The Education Division designs, develops, and manages the PCE of all AF chaplains and chaplain assistants. The division conducts two AF specialty awarding/accession courses and three supervisory leadership courses. The division offers three-day issue- and subject-specific courses as well as subject-specific distance learning courses broadcast by satellite to ensure that chaplain and chaplain assistants maintain vocational excellence throughout their careers.

The Resource Division is charged with staying abreast with the best tools and information in support of ministry for the AF community. It assesses needs and delivers resources, primarily through the AF chaplain service Web site (http://www.usafhc.af.mil). The chaplain Web site serves two primary purposes. It furnishes tools and information that directly support and inform ministry in the field. Such resources range from suicide prevention to balancing the chapel's books. The chaplain service home page also provides an opportunity and channel for chaplains and chaplain assistants to submit ideas, critiques, or any other input that might further the purposes of the ministry.

The Resource Division also presents appropriate resources to the field through conferences such as the Marriage and Family Ministry Conference.

**Mission:** Provide education, training, and resources that promote professional excellence and enhance the free exercise of religion to achieve global ministry for the USAF family.

**Goals:** Achieve vocational excellence, professional integrity, and service to others by

- ? providing knowledge, skills, and resources for students to better perform their duties;
- ? attracting, mentoring, and recognizing quality people;
- ? ensuring that faculty and course directors properly apply instructional system development principles;
- ? securing resources to support mission requirements;
- ? improving information flow and ensuring effective communication; and
- ? monitoring the quality of support services and seeking necessary improvements.

### Curriculum

The USAF CSI encourages an academic environment that recognizes the value of each student's prior education and experience. Through free expression of ideas and immediate application of knowledge gained, the atmosphere of the institute remains progressive as it strives to prepare students for the AF chaplain service of the future. The faculty and staff of the institute advocate top-quality ministry and support of ministry.

**Curriculum Summary** 

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	Academic
Course Title	Hours
Basic Chaplain Course	160.0
Intermediate Chaplain Course	80.0
Wing Chaplain Course	80.0
Chaplain Assistant Apprentice Course	227.5
Chaplain Assistant Craftsman Course	77.5

### **Academic Credit**

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of enlisted apprentice and craftsman courses may receive nine and five semester hours of credit respectively toward an associate degree. Course graduates may apply for credit through the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. For further information, contact a base education office or see the CCAF catalog.

The institute also awards continuing education units for all chaplain courses so that chaplains may maintain ecclesiastical and professional standing with their respective denominational endorsing agencies. For further information, contact the Chief, Education Division,

USAF Chaplain Service Institute, 155 N. Twining Street, Maxwell AFB, AL 36112-6429.

# **Initiatives Summary**

Instruction of enlisted students in crisis intervention skills, trauma pastoral care and pluralism and faith group support requirements will further their professional abilities to support chaplains in peacetime and contingency operations. Officer and enlisted evaluation systems have been added to all levels of instruction, ensuring that chaplain and senior enlisted support personnel will use evaluation and supervisory skills appropriately.

The institute's Education and Resource Divisions are investigating ways to further develop distant learning opportunities through video home system (VHS) format video, satellite broadcasts, and text-based projects. The Resource Division's primary objectives currently include improving the quality of service and delivery of materials through automation technology and targeting needs assessments to fill resource "vacuums."

# **USAF First Sergeant Academy**

CMSgt Sandra J. Williams, Commandant

Internet Address
www.maxwell.af.mil/au/cpd/fsa

The importance of the position of first sergeant has long been recognized in American military ranks. In 1778, at Valley Forge, Baron Von Steuben wrote in the *Regulation for the Order and Discipline of the Troops of the United States*, "The soldier having acquired that degree of confidence of his officers as to be appointed first sergeant of the company, should consider the importance of his officers; that the discipline of the company, the conduct of the men, their exactness in obeying orders, and the regularity of their manners, will in great measure depend on his vigilance. The first sergeant . . . is to be always in camp or quarters, to answer any call that may be made."

Through the years, persons selected for first sergeant duty primarily trained themselves in their duties and responsibilities, taking over where their predecessors left off. With increases in technology, advances in the complexity of administrative and legal procedures, and the need for improved human relations, the USAF saw that first sergeants needed to receive formal training.

The First Sergeant Course was established at Keesler AFB, Mississippi, in October 1973, and was renamed the USAF First Sergeant Academy in 1982. The academy remained at Keesler until July 1993 when it was moved to Maxwell AFB under the authority of order G-65 and aligned with the Ira C. Eaker College for Professional Development.

**Mission:** Prepare selected active duty and Air National Guard senior non-commissioned officers to become more effective leaders and managers in their roles as first sergeants, capable of advising commanders in maintaining the health, morale, welfare, and discipline of assigned enlisted personnel during peacetime, time of crisis, and conflict.

**Goals:** Educate and train first sergeants in the diverse areas of responsibility, accountability, and discipline in which they will serve America's dynamic Air Force well into the next century.

### Curriculum

The academy's curriculum is divided into five major areas: unit administration, dynamics of human resources, quality force management, deployment issues, and military justice.

### **Duration and Quota**

The USAF First Sergeant Academy Course is 20 academic days and can train up to 56 students per class. The First Sergeant Academy Air National Guard Course is a 10-day course that can train up to 32 students per class. Both courses have six offerings each fiscal year.

## **Prerequisites and Selection**

Resident students must be volunteers for the special duty of first sergeant. They must be recommended by their commander and personally meet a selection board consisting of one field grade commander, two first sergeants of equal or higher grade who have at least one year of experience as a first sergeant, and the wing command chief master sergeant. Final selection rests with the major command command chief master sergeant.

# **Curriculum Summary**

	Academic
Course Title	Hours
USAF First Sergeant Academy Course	160
First Sergeant Academy Air National	
Guard Course	80

### **Academic Credit**

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the USAF First Sergeant Academy Course who are enrolled in CCAF may receive 10 semester hours of credit. Graduates of the First Sergeant Academy Air National Guard Course receive three semester hours and the Additional Duty First Sergeant Symposium receive two semester hours.

Course graduates may apply for credit through the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. For further information, see the CCAF catalog and consult with your education service officer.

# **Initiatives Summary**

The USAF First Sergeant Academy has put forth several initiatives that will increase the efficiency and effectiveness of the academy and improve the quality of instruction.

In 1999, the academy implemented a major revision of its curriculum. The primary focus was to ensure the curriculum's technical data and operational procedures were current and valid. The academy added 15 hours of deployment. The academy continually reviews teaching methodologies to provide and encourage maximum student participation in the learning process.

A Web-based survey was conducted in 2001 from field-experienced first sergeants and their feedback on relevancy and time spent on core tasks allowed the academy to adjust the curriculum to meet current needs. This survey will be used on a two-year cycle to allow the academy curriculum to be updated as necessary.

Web-based training is also being explored to provide continuation training on demand using technologies such as interactive training and digitized role-playing.

An ongoing upgrade of computer and audiovisual systems will allow greater use of computer-based training and standardize the method of lecture presentation by staff members and guest instructors. Selfimprovement activities and renovation of facilities continues to improve the educational environment.

# **USAF Historian Development School**

MSgt Ellery D. Wallwork, Director

Internet Address
www.maxwell.af.mil/au/cpd/

The USAF Historian Development School became operational in January 1995. The school is responsible for technical training in the historian career field. It conducts two in-residence courses—Historian Apprentice and Historian Craftsman—and develops and maintains one distance-learning course—Historian Journeyman.

The Historian Apprentice Course is 18 academic days long and is designed for new enlisted historians entering the AF history program. The curriculum provides a foundation in the principles and methods of preparing periodic histories and managing a wing history program.

The Historian Journeyman Course capitalizes on technology and is built for the midlevel, enlisted historian. This distance-learning course expands on the areas of the historian career field, security, periodic history, reference services, contingency, and administration. The state-of-the-art course on CD-ROM approaches technical training via an interactive, multimedia, computer-based format. The course is available through the Air Force Institute for Advanced Distributed Learning (AFIADL).

The Historian Craftsman Course is 10 academic days long and places the experienced historian in a dynamic environment similar to what is experienced in the field. Following an intense, practicum-based curriculum, the prospective craftsman historian will research and write a historical special study, conduct an oral history interview, evaluate actual periodic histories, and conduct an analytical oral briefing during a mock commander's stand-up.

All three courses cited above prepare enlisted and selected civilian historians to assist today's commanders in the decision-making process and capture the AF's corporate memory for the senior leaders of tomorrow.

**Mission:** Conduct skill-level awarding courses to train active duty, Air National Guard, and Air Force Reserve enlisted historians. The school

provides instruction on methods and techniques for conducting a comprehensive history program.

**Goals:** Provide historian trainees with a strategic framework for acquiring three-, five-, and seven-skill level competencies in the enlisted historian career field. The objectives are to

- ? develop curriculum and conduct resident and distance-learning historian instruction including a correspondence course distributed through AFIADL;
- ? represent the historian career field in forums involving training issues;
- ? provide consultation to the Headquarters USAF Office of History (USAF/HO) and other organizations; and
- ? assist in developing and revising promotion tests, training standards, and related materials.

# **Initiatives Summary**

The USAF Historian Development School is testing and revising the Historian Journeyman Course. This is an interactive, multimedia software, CD-ROM course.

### Curriculum

The school curriculum enables historians to prepare organizational histories more effectively.

## **Duration and Quota**

The apprentice course is held four times each year for 18 academic days with an average of 13 students per class. The craftsman course is held three times annually for two weeks with an average of 10 students per class.

# **Prerequisites and Selection**

The prerequisites for selection and attendance differ for each skill level in the historian career field specialty.

Three-level Course Prerequisites. AF enlisted personnel (active duty, Reserve, or Guard) approved for retraining into the historian AFSC 3H0X1 will be given priority for dass seats. With approval of the major command history office and the course director, the following individuals may attend on a space-available basis: enlisted personnel assigned additional or part-time duties as unit historians, civilian personnel with collateral or part-time duties as unit historians, and civilians interning as historians. All attendees must be proficient typists and familiar with computers and word processing software. Selected personnel must not have submitted a request for reassignment from the history AFSC.

**Five-level Course Prerequisites.** Must complete in-residence Historian Apprentice Course.

**Seven-level Course Prerequisites.** Must complete Historian Journeyman Course through correspondence. The student must be a staff sergeant or higher, be enrolled in seven-skill level upgrade training, and have met the minimum time requirement in upgrade training. The student must also be familiar with Microsoft Word version 6.0 or later and Microsoft PowerPoint 4.0 or later.

## **Curriculum Summary**

	Academic
Course Title	Hours
Historian Apprentice Course	144
Historian Journeyman Course	*
Historian Craftsman Course	80

<sup>\*20-30</sup> hours to accomplish 959 individual on-screen modules.

### **Academic Credit**

Through affiliation with CCAF, graduates of the Historian Apprentice Course who enroll in the CCAF receive five hours of credit on their transcripts. Graduates of the Craftsman Course earn three semester hours of CCAF credit toward an associate degree.

All graduates may receive a transcript reflecting these credit hours by contacting the Registrar, CCAF/RRR, 130 W. Maxwell Blvd., Maxwell AFB, AL 36112-6613. Interested students are encouraged to contact their base education office.

# EXTENDED STUDIES AND ADVANCED DISTRIBUTED LEARNING

The Air University, through the Air Force Institute for Advanced Distributed Learning, supports the Air Force extension course programs and the Air Force distance learning mission, and exercises operational control of the Air Technology Network.

# AIR FORCE INSTITUTE FOR ADVANCED DISTRIBUTED LEARNING

Col Gary L. Albaugh, Commander

# Internet address

http://www.maxwell.af.mil/au/afiadl

**Mission:** Promote, deliver, and manage advanced distributed learning for our aerospace forces.

The Air Force Institute for Advanced Distributed Learning, located at Maxwell AFB-Gunter Annex, formally came into being on 1 February The institute was established by the merger of three distinct organizations: the Air Force Distance Learning Office (AFDLO) and the Extension Course Institute (ECI). At that time, the AFDLO had operational control of the Air Technology Network Program Management Office (ATN PMO). AFDLO was established 7 November 1995 to serve as the focal point for all AF distance learning (DL) matters. ECI was established in 1950 as one of AU's professional specialized schools. As the Air Force's only correspondence school, ECI's original mission was to provide voluntary nonresident courses for both active duty and reserve AF personnel. The ATN PMO was created in February 1996 as an outgrowth of AFIT's Center for Distance Education and served as the focal point for the management of the Air Force's DL satellite network, ATN. On 2 July 2001, ATN was realigned as AFIADL operating location "A." Today AFIADL supports formal training and educational programs of the AF, ANG, and AFRes by providing career-broadening advanced distributed learning courses to people throughout the DOD and to civil service employees in all federal agencies.

Advanced distributed learning is an evolution of distributed learning (distance learning) that emphasizes collaboration on standards-based versions of reusable objects, networks, and learning management systems, yet may include some legacy methods and media. DL media include interactive television (ITV), interactive multimedia instruction (IMI), Internet-based instruction (IBI), paper-based instruction, and other instructional technologies. Advanced distributed learning (ADL) includes all DL media. In the future distance learning will also consist of instructional modules comprised of "sharable content objects" delivered though several technologies.

The ADL initiative (ADLI) is a structured, adaptive, and collaborative effort between the public and private sectors to develop the standards, tools, and learning content to provide "anytime, anywhere"

instruction to US Forces. AETC is the lead command for ADL within the Air Force. AFIADL serves as the focal point and executive staff agent on these efforts under the guidance of AETC's directorate of education.

AFIADL promotes, delivers, and manages advanced distributed learning for our aerospace forces. Over the years the mission has undergone several major changes. In 1963 when ECI started providing self-study materials for the Air Force's official upgrade training program, the institute became an essential and mandatory part of the dual-channel concept for the enlisted training program. In 1969 ECI was given the additional mission of providing study reference materials to AF enlisted personnel to use in preparing for specialty knowledge testing under the weighted airman promotion system (WAPS).

AFIADL operates in a fully automated environment. Course development, production, distribution, and student administration functions are managed on a sophisticated system of personal computers and a mini-mainframe. The data is accessible worldwide to AFIADL, ACSC, SOS, SNCOA, course authors, education service offices, and unit/base-level training sections. To profit from rapidly growing technological capabilities, AFIADL has departed from entirely paper-based curricula to include interactive television and computer-based courseware. AFIADL is, with the rest of DOD, exploring the standards required for Internet delivery and management of courses. In print-based curricula, AFIADL enhanced its efficiency and productivity by moving to a print-on-demand process for course examinations and is planning for use of new learning technology for courseware delivery.

The AF delivers many of its courses via ATN, an ITV network. ATN (http://atn.afit.edul) reaches 216 classrooms at 127 AF bases within the United States (including Alaska and Hawaii) and 10 locations in Europe, with education and training programs broadcast from uplinks at Wright-Patterson (the first uplink on ATN), Maxwell, Sheppard, and Keesler AFBs. The connection to Europe is being made through the *Joint Broadcast Service* with a gateway uplink at the Pentagon. Since its development in 1991, ATN has been used to provide continuing education and training to over 32,000 students.

AFIADL conducts a one-week course for authors to provide new writers of CDCs with the basic knowledge and experience needed to produce effective extension course materials. The course, which is offered three times a year, is a practicum in the use of instructional systems development to write and revise CDCs. During the week, new writers work under the tutelage of institute educators and gain hands-on experience in every phase of course development: writing topical statements, developing tests and text, and processing and evaluating a course. New writers also become familiar with AFIADL's procedures and become acquainted with staff members with whom they will be working.

AFIADL administers and distributes more than 450 courses. They fall into four categories: PME, PCE and training courses via ATN,

specialized courses, and CDCs. The institute distributes the following nonresident courses:

#### **PME Courses**

PME courses are taken by both commissioned and noncommissioned officers. These courses teach leadership, management principles, techniques of effective communication, problem solving, analysis of professional reading materials, international relations, national decision making, and defense management. They also cover the psychology of learning, individual differences, and the techniques of teaching. The courses give students the broad skills and knowledge needed to be effective at various stages in their careers.

AFIADL distributes nonresident PME through distance learning products ranging from paper-based through CD-ROM. PME is also available by seminar or in residence through the schools.

## **PCE and Training Courses**

AFIT and the various schools within Second AF use AFIADL's satellite network, ATN, to reach thousands of students every year to fulfill their PCE and training needs.

# **Specialized Courses**

Specialized courses focus on technical and special subjects that are useful in many career fields. Examples are contracting, finance, and logistics courses. These courses also provide career broadening to individuals as they progress to higher levels and are required to become more knowledgeable in career fields other than their own.

# **Career Development Courses**

CDCs constitute the largest portion of AFIADL's curricula. These self-study courses help airmen complete the task-knowledge portion of the dual-channel concept for the enlisted training program. The dual-channel concept is an on-the-job training program that requires the completion of CDC courses for skill-level upgrade—a requirement for promotion. Airmen must complete CDCs successfully at various stages

to advance in their careers. CDCs are also available on a voluntary basis for career broadening.

Air Force members can obtain further information about the institute's courses and enrollment through their base education or training office. The *AFIADL Catalog* provides up-to-date information on courses, programs, and policy and procedures. You can access the catalog on-line at: http://www.maxwell.af.mil/au/afiadl/curriculum/catalog/cattoc\_fr.htm. The institute's Web page provides information about CDCs required by AFSC, available test control facilities, names and phone numbers of staff members to assist with student inquiries, and other useful information available to students all over the world. The catalog also provides information on academic credit recommendations for these courses. A list of credit recommendations for AFIADL courses also can be found in the current *Guide to the Evaluation of Educational Experiences in the Armed Services*. AFIADL also publishes *Curriculum Update* as a forum to discuss updates in the area of curriculum development.

# **CITIZENSHIP EDUCATION**

Besides its professional military and continuing education, Air University supports two nationwide programs—the Civil Air Patrol and Junior Reserve Officer Training Corps—that instill citizenship values among our nation's youth.

# AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS

Col Brian C. King, Director

Internet Address
http://www.afoats.af.mil/Junior

The Air Force Junior Reserve Officer Training Corps (JROTC) program was founded in 1911 in Cheyenne, Wyoming, by Army Lt Edgar R. Steevers. Lieutenant Steevers was assigned as an inspector-instructor of the organized military of Wyoming. During his assignment, he envisioned a noncompulsory cadet corps comprised of high school students. His program was aimed toward making better citizens.

The National Defense Act of 1916 authorized a junior course for noncollege military schools, high schools and other nonpreparatory schools. The Army implemented JROTC in 1916. Public Law 88-647, commonly known as the ROTC Vitalization Act of 1964, directed the secretaries of each military service to establish and maintain JROTC units for their respective services.

"(The) purpose of Junior Reserve Officers' Training Corps [is] to instill in students in United States secondary educational institutions the value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment." (10 USC Sec 2031)

JROTC is a continuing success story. From a modest beginning of 20 units in 1966 the Air Force JROTC has grown to 687 units throughout the world with current enrollment of over 103,000 cadets. The JROTC program positively influences our country by helping one student at a time. JROTC instructors are helping to form tomorrow's nation by educating proud and patriotic cadets—tomorrow's leaders.

**Mission:** The mission of Air Force Junior Reserve Officer Training Corps is "Building better citizens for America."

The objectives of JROTC are to educate and train high school cadets in citizenship, promote community service, instill responsibility, character, and self-discipline, and provide instruction in air and space fundamentals.

# **Programs and Operations**

The JROTC program encompasses approximately 103,000 cadets more than 1,400 instructors and is made of units in 48 states, the District of Columbia, Puerto Rico, Italy, Germany, Belgium, Netherlands, United Kingdom, Japan, Korea, and Guam.

There are three branches within the JROTC program: Instructor Management, Resources, and Operations and Training.

**Instructor Management.** Recruits, nominates, and assists in hiring retired officers and noncommissioned officers. Provides assistance and authoritative guidance to instructors, school officials, and subordinates. Receives and processes instructor applications. Ensures instructors are certified, recertified, or decertified. Supervises administration of the instructor evaluation system.

**Resources.** Provides financial management and administrative pay and accompanying accounting services for the JROTC Instructor Pay Program. Formulates, executes, and analyzes budgets for assigned schools, organization's support activities, and organizational components. Monitors, tracks, and reviews obligations, expenditures, reimbursable orders, and projected costs to determine trends in spending and forecast annual funding needs. Reviews budget submissions for compliance with rules, regulations, and procedures.

# **Operations and Training**

Consists of three sections:

**Operations Support.** Provides staff initiatives and policy to implement the world's largest aerospace science and education program. Ensures reports are conducted pursuant to DOD directives and AF instructions. Manages the Honors Ground School Program and oversight for FAA certified instructors. Conducts certification and training workshops and collects data on student performance and demographics. Coordinates site surveys at schools interested in hosting an AF JROTC unit. Functions as the activation and deactivation coordinator for all JROTC units.

**Regional Inspection Coordinators.** Conducts and prepares inspection reports for selected JROTC units. Ensures reports are conducted pursuant to DOD directives and AF instructions. Reviews inspection reports to ensure school districts comply with the Application and Agreement for establishing a JROTC unit. Suspense and follow up on reported discrepancies.

**Logistics Support Responsibilities.** Provide logistics, supply, and facilities support and guidance regarding procurement, storing, and

inventory of supplies and equipment, AF uniforms, and inert rifles for the JROTC Program.

### Curriculum

The curriculum is a balance of 60 percent aerospace science and 40 percent leadership education. Retired AF commissioned and noncommissioned officers are full-time faculty members of the participating high school and are employed by the local school board to teach the classes.

The success and growth of the JROTC program lies in the progressive and academically sound curriculum. The first year covers the heritage and development of flight and military aerospace policies. The second year includes the environment in which aircraft and spacecraft operate. Flight and navigational principles and the requirements for human flight are also included. Rocketry, space vehicles, and the exploration of space are covered in the third year. The fourth year offers three options: Option 1, Management of the Cadet Corps; Option 2, Honors Program-Ground School; and Option 3, Laboratory Manual, Geography, and Survival.

Leadership education is emphasized each year. Course work helps prepare cadets for positions in any military or civilian career. There are classes on military customs and courtesies and flag etiquette, plus instruction in marching.

# **Curriculum Summary**

Year	Aerospace Science	Hrs	Leadership Education	Hrs	Total
					Hrs
	Frontiers of Aviation		Introduction to Air		
1	History	108	Force JROTC	72	180
	The Science of		Intercommunication		
2	Flight	108	Skills	72	180
	The Exploration of				
3	Space	108	Life Skills	72	180
4	Options	108	Principles of Management	72	180

# CIVIL AIR PATROL-US AIR FORCE

Col Albert A. Allenback Jr., Commander

Internet Address
http:// www.maxwell.af.mil/au/cap

The Civil Air Patrol-US Air Force (CAP-USAF) provides advice, liaison, and oversight to America's voluntary auxiliary of the Air Force, the Civil Patrol (CAP), a private corporation. CAP-USAF headquarters at Maxwell AFB—along with eight CAP-USAF regional commands provides training, policy guidance, and assistance to more than 60,000 CAP members throughout the United States, in Puerto Rico, and on many overseas Air Force installations. CAP-USAF, including its 500-plus Reservists, plays a key role in helping CAP meet its congressionally mandated missions.

### **Civil Air Patrol**

Internet address
http://www.capnhq.gov

CAP was created on 1 December 1941 as a part of the Office of Civilian Defense. During World War II, CAP was an integral part of North American defense, patrolling the 1,200 miles of coastline from Halifax, Nova Scotia, to the Florida Keys searching for enemy submarines and other signs of enemy activities. In 1943 CAP transferred to the Army Air Forces. In 1946 CAP was chartered by congressional act as a nonprofit, benevolent organization devoted to humanitarian activities. By another act of Congress in 1948, CAP became the official auxiliary of the USAF.

Today's CAP has more than 35,027 senior (adult) members and some 26,189 cadets in 1,700 units nationwide. CAP units have an organizational pattern and rank structure similar to that of AF units.

CAP's congressional charter mandates the organization to furnish the American public with emergency services and aerospace education and to administer the CAP cadet program. Headquarters, CAP-USAF provides advice, liaison, and oversight to the more than 60,000 CAP members throughout the United States and Puerto Rico and on many Air Force installations overseas. CAP-USAF provides training and direction to the auxiliary in its three congressionally mandated missions.

CAP furnishes trained volunteers who support noncombat AF missions throughout the United States. CAP conducts more than 85 percent of the inland search and rescue missions authorized by the Air Force Rescue Coordination Center at Langley AFB, Virginia. Daily

operations include aerial reconnaissance missions for the US Customs Service, the Drug Enforcement Administration (DEA), and the US Forestry Service to support the war on drugs. CAP maintains an extensive, survivable radio network providing emergency communications when disasters strike.

Aerospace education is provided for CAP members and the country at large through its comprehensive outreach program, including the annual National Congress of Aviation and Space Education (NCASE). CAP aerospace education reaches the classrooms of more than 300,000 students each year, encouraging an interest in aviation and the sciences. The cadet program fosters personal discipline, patriotism, and leadership in young people across the nation and on AF installations worldwide. Through its cadet program, CAP

- ? provides an organization to encourage and aid US citizens in contributing their efforts, services, and resources in developing aviation and in maintaining aerospace supremacy;
- ? provides aerospace education and training, especially to its senior and cadet members;
- ? encourages and develops, by example, the voluntary contribution of private citizens to the public welfare;
- ? encourages and fosters civil aviation in local communities; and
- ? provides an organization of private citizens with adequate facilities to assist in meeting local, state, and national emergencies.

CAP has adopted several initiatives to furnish better service to the public. These efforts include an ongoing recruiting drive to attract new members, modernizing and improving its aircraft fleet and equipment, and a screening program of all senior members associated with the cadet program.

CAP has eight geographical regions composed of 52 wings—one for each state, Puerto Rico, and the District of Columbia. Wings are divided into groups, squadrons, and flights. A liaison staff of active duty, Reserve, and retired AF personnel works with each of the 52 wings in the eight CAP regions in the United States. The Headquarters CAP–USAF is collocated with CAP's National Headquarters, Maxwell AFB, Alabama.

## **Emergency Services**

CAP's primary operational missions include air and ground search and rescue (SAR) and disaster relief (DR)—whether in response to manmade events, as in civil defense or natural disasters. CAP has access to 530 CAP and 3,700 member-owned general aviation aircraft, plus vast

amounts of ground rescue equipment and radios. CAP operates national, regional, and local high frequency (HF) and very high frequency (VHF) radio networks with more than 24,000 radio devices, including VHF-FM repeater systems. These networks provide valuable connectivity during a national emergency or major disaster.

SAR operations are carried out primarily under USAF authority at the request of the Air Force Rescue Coordination Center and other DOD joint rescue coordination centers. In 2000 CAP aircrews flew 7,304 search hours and saved 77 lives.

DR operations during peacetime are coordinated by local and state emergency management authorities and authorized by the Air Force National Security Emergency Preparedness Office. During a national emergency, CAP DR tasking comes from the federalized state adjutant general. CAP provided the first aerial photographs of the World Trade Center terrorist attack in September of 2001.

# **Counterdrug Operations**

CAP flew 21,875 hours in 2000 in support of this program. Aerial reconnaissance, transportation, and communications support are among the most important missions CAP performs for the US Customs Service, the DEA, and the US Forest Service. A key element of this program is the single-frame video reconnaissance equipment CAP uses to transmit near-real-time still photos to law enforcement agencies. This capability has played a vital role in recording images of suspicious vegetation growth for follow-up investigations.

CAP has other AF and DOD noncombatant support missions that are coordinated through emergency services. These include

- ? surveys of low-level training routes,
- ? Military Support to Civil Authorities (MSCA) and Joint Key Assets Protection (JKAP),
- ? damage assessment and reconnaissance,
- ? light cargo transport and courier service,
- ? training for various operational missions, and
- ? conducting the AF ROTC/CAP Flight Orientation Program.

# **Cadet Programs**

CAP cadet program is open to young men and women who are 12 years old or in the sixth grade and are no older than 21. CAP cadets are involved in a leadership training program based on activity and achievement. The cadet program includes 15 achievements in four phases. Accomplishments in each phase and achievement lead to

progression in rank from cadet basic to cadet colonel and to eligibility to participate in additional activities such as summer encampments, an international exchange, and special activities at AF bases and other DOD installations.

CAP offers the cadets opportunities to receive training in glider and powered flight, radio communications, and various emergency service specialties. The cadet program also provides study and involvement in four curriculum areas—aerospace education, leadership laboratory, moral leadership, and physical fitness.

**Aerospace Education.** This portion of the cadet curriculum orients the cadets to the diversity of the aerospace community. It develops an understanding of flight; aircraft and space vehicle power plants; navigation; weather; air traffic control; and the social, political, and economic impact of aerospace.

**Leadership Laboratory.** This area exposes the cadet to opportunities to learn and practice basic leadership, administration, and management techniques. Cadets may complete several annual activities, such as the Cadet Officer School, National Cadet Competition, Computer Orientation Program, and AETC Familiarization Course at three AETC bases. Other annual events that aid cadets in outdoor activities are the Cadet Pararescue courses, held during summer months at three locations in the United States and CAP's joint program with the Experimental Aircraft Association.

**Moral Leadership.** This portion of the cadet curriculum furnishes cadets with a forum to discuss contemporary issues under the leadership of an ordained cleric. The purpose is not to espouse any religious doctrine or teachings but to allow cadets to draw their own moral conclusions based on these discussions.

**Physical Fitness.** Scaled to the cadet's age group, the USAF aerobics program provides an early exposure to physical fitness as a lifetime requirement.

International Programs. In addition to these four curriculum areas, the cadet program includes international opportunities. Each summer since 1948, CAP cadets and senior-member escorts, with AF assistance, participate overseas as US representatives in the International Air Cadet Exchange—a program that promotes international understanding, goodwill, and friendship among young people who have a common interest in aviation.

Likewise, a 16-day exchange to the United States provides international cadets with sight-seeing trips, tours of aerospace industries and museums, visits to airports and AF installations, orientation and training flights in gliders and powered aircraft, and visits in the homes of host CAP families. This program has grown over the years and has involved some 41 countries.

# **Aerospace Education**

CAP's aerospace education effort works, both internally (with its membership) and externally (with the general public), toward developing an understanding and appreciation of the importance of aerospace for our country. Cadets and senior members take part in a structured aerospace education program and have access to current aerospace events.

The program's purpose is to develop a membership that can provide grassroots understanding and leadership in aerospace education in local communities. Through its outreach programs, CAP provides aerospace education to the American citizenry through the education community. These outreach efforts include teacher workshops, curricular materials, educational liaison, and cooperative programs.

**Teacher Workshops.** Each year nearly 200 colleges, universities, and school systems offer CAP-sponsored aerospace education workshops for approximately 5,000 teachers. These projects provide teachers and school administrators with a basic understanding of aerospace and prepare them to include aerospace education in their curricula at all levels.

**Curricular Materials.** CAP produces courses of study, textbooks, instructor guides, audiovisual materials, and other supplementary materials. Many schools (private, public, and parochial) use this material to present aerospace education to their students.

**Educational Liaison.** CAP maintains a close liaison with state school officials, college and university administrators, and private, public, and parochial school systems to promote aerospace education in the schools of our nation.

Cooperative Programs. CAP maintains a close relationship with other aerospace education groups to develop cooperative aerospace education programs. These groups include the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration (NASA), the National Air and Space Museum, state aeronautical commissions. the General Aviation Manufacturers Association, the Air Transport Association, the Aircraft Owners and Pilots Association, the Young Astronaut Council, and the Air Force Association. An example of this cooperation is the annual NCASE, the only nationallevel convention for aerospace education held in our nation.

This annual event is sponsored by CAP and plays a significant role in fulfilling its congressional charter to educate the American public about aerospace topics. About 1,000 educators attend the national congress for the three-day symposium. They return to their classrooms to teach students and parents using educational materials and techniques learned during their NCASE experience.

# **ACADEMIC SUPPORT**

The Air University resident and distance education programs are supported by several supporting organizations that provide essential research facilities—some not equaled at any other academic institution. Air University has top-notch broadcasting and multimedia capabilities that allow its schools and organizations to provide worldwide educational opportunities to Air Force and Department of Defense personnel. These agencies enable the Air University to furnish essential mission support to a wide range of Air Force units and commands, including Headquarters Air Force.

# AIR UNIVERSITY REGISTRAR

Dr. Irene Pearson-Morrow

Internet Address
http://www.maxwell.af.mil/au/oas/rrwebpg.htm

The Air University Registrar oversees three branches: Services and Central Records. Officer PME. and Scheduling Requirements Analysis. Through its Services and Student Records Branch, the registrar provides a 30-year archival data trail for AU schools, produces transcripts for graduates of those schools, and serves as admissions officer for AWC and ACSC master's degree programs. The registrar enrolls distance education students, monitors their progress, and produces their completion certificates and diplomas. The Officer PME Branch functions as the single input source for updating USAF records with PME course completions and supports promotion boards by screening graduate records to provide PME graduate data. The Central Scheduling and Requirements Analysis Branch manages course requirements, allocations, schedules, and program changes.

# **Transcript Requests**

Individuals must request transcripts in writing from the Services and Records Branch, Air University Registrar (AU/CFRR), 60 W. Shumacher Ave., Maxwell AFB, AL 36112-6337. All requests must include the student's name, any previous names used, social security number, dates of attendance, school or course completed, complete address where the transcript is to be mailed, the student's signature, current address, and phone number. The above information may also be faxed to (334) 953-8127. For additional information call DSN 493-8128/1240 or (334) 953-8128/1240.

# Notice to Students: Family Education Rights and Privacy Act of 1974 (Public Law 93-380)

The following notice is published as a public service to the student body. Federal regulations require annual notice to students on this subject.

Federal regulations are designed to protect the privacy of student records. The statute and regulations govern access to records, their release, and the rights of students to review and, if necessary, challenge information they believe to be inaccurate.

This notice is a digest of these regulations. The full text is available for student examination in AU/JA, building 800, room 22. Under the act, "education records" (with certain exceptions as listed below) include those records, files, documents, or other materials related directly to a student and maintained by AU in an official records system. Records made by AU personnel that are in the sole possession of the maker and are not revealed to any other person are exempt and not part of an individual's education records.

During the academic year, students may review their official education records by contacting appropriate personnel responsible for records within each applicable AU school at Maxwell AFB, Alabama. After attendance, former students may review their official education records by contacting the AU Registrar's Office. AU students have the right to challenge any material contained therein on the basis of its being inaccurate, misleading, or inappropriate. The right to challenge grades does not apply under the act unless the grade was inaccurately recorded.

Exceptions to the right to review records by students are confidential letters and statements of recommendation made prior to 1 January 1975 and any other recommendations for which the student has voluntarily waived the right to access. Under no circumstances will waiver of right to access be made a condition for admission to any academic program or school within AU.

With specified exceptions, AU may release information in a student's records to others if:

- (a) signed and dated written consent from the student specifying the records to be released and the reasons for such release and to whom is on file with the registrar, and the consent is within governing directives.
- (b) such information is furnished to comply with judicial orders, upon condition that AU will make a reasonable attempt to notify the student in advance of compliance with the subpoena or judicial order.

Education records or personally identifiable information, other than public information, may be released without the written consent of the student to the following:

- (a) other AU officials who have a legitimate need to know,
- (b) officials of other DOD schools in which the student intends to enroll, and

(c) authorized representatives of certain federal agencies and education agencies or state educational authorities under certain conditions.

# AIR UNIVERSITY LIBRARY

Dr. Shirley B. Laseter, Director

Internet Address
http://www.maxwell.af.mil/au/aul/aul.htm

The Air University Library (AUL), founded in 1946, is the premier library in the DOD. It houses well-balanced collections especially strong in the fields of war fighting, aeronautics, AF and DOD operations, military sciences, international relations, education, leadership, and management. AUL improves AF education by providing access to the world of information through quality library services.

The library holds more than 2.4 million items, including 500,000 military documents; 400,000 monographs and bound periodical volumes; 614,000 maps and charts; 150,000 current regulations and manuals; and 900,000 microforms.

AUL sits at the center of Chennault Circle. The library building, Fairchild Library, is named after the founder and first commander of AU, Gen Muir Stephen "Santy" Fairchild. Air University Library also operates a branch library at the AFSNCOA located at Maxwell AFB–Gunter Annex. The branch provides tailored information collections and services for senior NCO PME.

An active program of bibliographic publications and indexes facilitates access to the library's holdings and information. Special subject bibliographies are published throughout the year and posted contemporaneously on the library's Web page. AUL publishes the quarterly *Air University Library Index to Military Periodicals* (now in publication for more than 50 years). The index is in CD-ROM format and is accessible from the AUL Web page.

Electronic information technologies are critical to the delivery of library resources and services. A third-generation integrated library system automates identifying, locating, and circulating library-owned materials. A robust home page provides Internet access to the Special Bibliography Series, other PME curriculum support materials, map and image sites, full-text journals and newspapers, and a steadily increasing number of links to key Web sites.

## AIR UNIVERSITY PRESS

Dr. Shirley B. Laseter, Director Ms. Bessie E. Varner, Deputy Director

#### Internet Address

http://www.maxwell.af.mil/au/aul/aupress/

The Air University Press, a division of the AUL, is the professional publishing arm of AU. Its products help promote creative thought on and appreciation of the value of air and space power. The Air University Publications Review Board, composed of senior officials from AU's officer PME schools, helps set direction for the press and advises and assists the press in procuring and evaluating manuscripts.

The press seeks to establish itself as a leading not-for-profit publisher on aerospace power and national security. To achieve this goal, the press engages in an active acquisitions program to attract manuscripts on relevant topics from a wide range of authors, including active duty military, civilian scholars, and independent researchers.

Through its unique artistic and in-house editorial capabilities, the press staff provides a complete range of publication services. It offers creative assistance in prepress production functions (design, layout, typesetting, and creation and use of illustrations and photographs) for all AU Press publications, including the *Aerospace Power Journal*, which is published in three languages—English, Spanish, and Portuguese.

Information on press publications is available through the *Air University Press Publications* catalog—in hard copy and on the Internet (www.maxwell.af.mil/au/aul/aupress/catalog). To inquire further about obtaining publications or submitting manuscripts, contact the Air University Press, 131 W. Shumacher Ave., Maxwell AFB, AL 36112-6615.

# AIR UNIVERSITY TELEVISION

Maj Craig L. Hendrix, Director

Air University Television (AUTV) is AU's dedicated television facility, the AF's southeastern regional television production center, and one of five Air Force distance learning uplink (broadcast) sites. From a full-service, \$5 million physical plant, AUTV provides video production and editing, cable distribution, satellite uplink and downlink (receive)

services, and television engineering consultation to support AU's professional military and continuing education courses locally and Air Force-wide.

As a part of the ATN, AUTV provides satellite uplink and downlink services. Courses are transmitted from the broadcast studio to downlink sites throughout DOD and the federal government. Downlink signals are distributed through Air University Cable Network (AUCN). AUTV also provides digitized video clips for inclusion in interactive courseware.

Production personnel produce broadcast quality videotape programs for a wide range of applications, from short video supplements to faculty lesson plans to full-length programs for widespread distribution. Video programming to support daily classroom needs is aired over the AUCN. The AUCN signal is received in all AU classrooms on Maxwell AFB and Gunter Annex. Presentations in each school's main auditorium are distributed live or recorded for delayed playback and entry into the video archive.

Engineering personnel provide the technical services required to install, maintain, and repair the more than 1,400 pieces of video equipment in the AUTV facility and its subsystems throughout the Maxwell–Gunter community. AUTV engineers also provide consultations to customers planning new requirements or modifications of existing multimedia presentation systems. They provide comprehensive product research, procurement planning, system description, schematic preparation, custom installation, acceptance testing, and emergency repairs.

# AIR FORCE ENLISTED HERITAGE RESEARCH INSTITUTE

William Chivalette, Curator

#### Internet Address

http://www.maxwell.af.mil/au/cepme/heritage/homepage.htm

The Air Force Enlisted Heritage Research Institute (AFEHRI) was established on 23 May 1997. Until that time, research functions and enlisted heritage data gathering activities supporting curriculum development to the College for Enlisted Professional Military Education, Educational Programs Cadre (EPC), were under the auspices of the Air Force Enlisted Heritage Hall. The Heritage Hall function had served at various points of time under the directions of the AFSNCOA commandant, CEPME commander, EPC dean, and CEPME vice

commandant. Research functions and support to curriculum development and responsibility for enlisted heritage and history materials used in the development of the Air Force Promotion Fitness Examination and study materials were transferred to the AFEHRI from the Enlisted Heritage Hall in 1997.

The Enlisted Heritage Research Institute preserves the rich and dramatic heritage and tradition of the enlisted corps of the USAF and its antecedents: Aeronautical Division, Army Air Service; Army Air Corps; and Army Air Forces in the development of airpower to defend the United States. AFEHRI achieves its mission by featuring artifacts, art collections, pictorial exhibits, written and oral documentation, audiovisuals, equipment, and selected aircraft parts. Additionally, students use the in-house and on-line research capabilities to enhance learning and complete enlisted heritage research projects. A significant archival holding is also available, and efforts are systematically made to ensure its growth and availability to researchers and the public.

The institute has two major subdivisions: the Research Institute, which provides research and curriculum support, and the AF Enlisted Heritage Hall, which serves the museum/display function. The AFEHRI is comprised of a director, director of operations, and the Air National Guard Liaison. The AF Enlisted Heritage Hall is operated and directed by a civilian curator.

# AIR UNIVERSITY BOOKSTORE

The AU Bookstore, operated by the Army and Air Force Exchange Service, is collocated with the AUL. The bookstore stocks a large inventory of books to support educational curricula of the schools located on Maxwell AFB and Gunter Annex, as well as other exchange customers. The bookstore handles special orders for numerous books. Its hours of operation are Monday–Friday, 0830–1630. Personnel eligible to use the AU Bookstore include military personnel and their dependents, military retirees and their dependents, Guard and Reserve members, and DOD civilians.

# **DIRECT REPORTING UNITS**

Maxwell AFB is host to two tenant, direct reporting units: the Air Force Doctrine Center and the USAF Historical Research Agency. These organizations pursue joint ventures with AU faculty, staff, and students to research and develop solutions to and understanding of vexing problems relating to future doctrine and war fighting.

# **HEADQUARTERS AIR FORCE DOCTRINE CENTER**

Maj Gen David F. MacGhee Jr., Commander Col Charles R. Rogers III, Vice Commander

Internet Address
http://www.doctrine.af.mil

In August 1996 Air Force chief of staff decided to reorganize AF doctrine institutions. He based this decision on the growing importance of joint war fighting and the perceived need to increase the AF's understanding of aerospace power doctrine. He realized that the other services had well-staffed organizations dedicated to writing doctrine and that their members were better educated in doctrine.

Established in February 1997, Headquarters Air Force Doctrine Center (AFDC) is a direct reporting unit (DRU) under the Air Force Chief of Staff. The unit's location at Maxwell gives its members immediate access to the resources of AU including AUL, AWC, ACSC, SOS, and CADRE.

The center serves as the "single voice" for AF doctrine development; represents the AF in joint doctrine forums; assesses the effects of new concepts and technologies on aerospace doctrine; disseminates tailored doctrine information across the Air Force, and pursues the correct representation of aerospace power and doctrine in models, simulations, exercises, and war games.

Approximately 100 individuals, military and civilian, are assigned to Headquarters AFDC. The commander's office and the Doctrine Development, Doctrine Applications, and Doctrine Deployment Directorates are located in the headquarters building at Maxwell AFB. The Joint Integration Directorate is located at Langley AFB, Virginia. AFDC also maintains a liaison office within the Pentagon.

The Doctrine Development Directorate focuses on writing and publishing doctrine documents. The Doctrine Applications Directorate advocates the correct application of aerospace power by being active in the planning, execution, and assessment of AF, other service, joint and multinational exercises, experiments, war games (EEW), modeling and simulations. The Doctrine Deployment Directorate advocates and deploys timely and focused aerospace doctrine by providing tailored doctrine education and responsive doctrine support of requests for doctrinal assistance. The Joint Integration Directorate maintains close coordination with Army, Navy, and Marine Corps doctrine commands; the joint chiefs; and North Atlantic Treaty Organization allies.

In addition, AFDC maintains operating locations at six military sites where aerospace power is an important part of Army training. These

locations are National Training Center, Nellis AFB, Nevada; air defense training, Fort Bliss, Texas; armor training, Fort Knox, Kentucky; combined arms training, Fort Leavenworth, Kansas; aviation training, Fort Rucker, Alabama; and artillery training, Fort Sill, Oklahoma. At each site, Headquarters AFDC personnel serve as AF representatives to the Army. They advocate proper application of aerospace power, articulate aerospace doctrine, provide feedback on emerging doctrinal issues, and participate in Army doctrine development.

Through AFDC, the AF has refined the doctrine development process. Today, AF doctrine is codified in a series of AF doctrine documents (AFDD). Most of the 34 AFDDs are entirely new publications, having never before existed in any form; some, notably AFDD 1, Air Force Basic Doctrine, are revisions of previously existing doctrinal publications. At any given time, several AFDDs are in various stages of revision as part of a two-year review process. Changes to an existing AFDD, or a proposal for a new AFDD, can be proposed at any time through the Air Force Doctrine Working Group (AFDWG). The typical AFDD takes about one year for writing, staffing, coordinating, and publishing. Each AFDD is assigned to an action officer within Headquarters AFDC who shepherds the document through the development process. Headquarters AFDC has taken advantage of available technology to publicize and disseminate doctrinal issues. All AFDDs, including those published and those under development, are available for review and comment through the Headquarters AFDC Web page. This comprehensive Web site also includes lessons learned and doctrinal initiatives for review and comment.

To provide Air Force-wide involvement in doctrine development, Headquarters AFDC semiannually hosts the AFDWG. The major commands and Air Staff agencies send senior officers to provide recommendations on doctrine to the Headquarters AFDC commander. Any AF organization may introduce issues before the AFDWG. Official recommendations require majority approval by senior officer representatives. To date, the AFDWG has recommended and the Headquarters AFDC commander has authorized the development of 34 AFDDs that address functional areas of aerospace power.

Since autumn 1997, Doctrine Applications staff members have participated in numerous EEW events. They have also briefed and advised MAJCOM and number AF (NAF) commanders, their staffs, and planners on aerospace doctrine applications, current issues, and initiatives. Doctrine Applications personnel have also served on the Air Force Exercise Coordination Team, visited AF battle labs, and attended modeling conferences to advocate the importance of aerospace doctrine and increase opportunities for promoting the correct application of aerospace power.

The Doctrine Deployment Directorate advocates and deploys timely and focused aerospace doctrine and supports the CSAF's Senior Mentor

program. The directorate develops and implements doctrine-specific instruction for AF senior officers and develops and provides doctrinal instruction to selected AF war fighters in preparation for their participation in war games and exercises. It provides this support through the Aerospace Doctrine Applications Exercise (ADAX), a CSAF-directed requirement for all new NAF commanders; and the Aerospace Doctrine Outreach (ASDO) program, which provides tailored doctrinal briefings to war-fighting staffs and other AF organizations upon request. The Deployment Directorate manages and executes an "accession-to-separation" doctrine education plan for all Air Force officers, enlisted members, and civilian personnel. It oversees the production and dissemination of a variety of tailored doctrine information products. It also provides doctrinal basics to AF PME and accessions instructors and all AF instructors at sister service schools.

# AIR FORCE HISTORICAL RESEARCH AGENCY

Col Dieter Barnes, Commander

Internet address
http://www.maxwell.af.mil/au/afhra/

The Air Force Historical Research Agency (AFHRA), collocated with AUL, is the repository for AF historical documents. The agency's collection, begun in Washington, D.C., during World War II, moved to Maxwell in 1949 to support AU. The AFHRA is a field operating agency under the policy guidance of the Air Force Historian at Headquarters USAF.

AFHRA's current holdings exceed 90 million pages and represent the world's largest and most valuable organized collection of historical documents on US military aviation. Materials cover subjects ranging from the use of balloons in the Civil War through AF activities in World War II, Korea, Vietnam, Operation Desert Storm, and the air war over Serbia. About three-fourths of the documents are USAF unit histories. The entire collection is open to the public except for classified or otherwise restricted documents (approximately 25 percent of the holdings). The agency's finding aids include a computerized database and bibliographies for identifying and locating individual documents on specific topics of interest to the researcher.

Special collections, some dating back to the early 1900s, complement the unit histories. Among the collections are historical monographs and studies; more than 2,000 oral history interviews; end-

of-tour reports of major overseas commanders; course materials of the Air Corps Tactical School from the 1930s; and working papers of key Army Air Forces staff offices, the British Air Ministry, and the Luftwaffe during World War II. Extensive Gulf War documentation—approximately 2,000,000 pages—and an electronic database—nearly 85 gigabytes—on the air war over Serbia have recently been added to the agency's holdings.

These holdings include chronologies, working papers, message traffic, and oral history transcripts, as well as unit histories and contingency historical reports for the Gulf War period. Collections of the personal papers of more than 500 key AF civilian and military officials—including Secretaries of the Air Force John L. McLucas, Robert C. Seamans Jr., and Eugene M. Zuckert, as well as Generals George S. Brown, George C. Kenney, Curtis E. LeMay, John D. Ryan, and Thomas D. White—are available to researchers.

In addition to being the Air Force's primary archive for historical documents, the Historical Research Agency performs research and other historical services. The agency's historical collection is readily available to AU students, faculty, and staff. Agency staff members provide research and advisory services to AU students to assist them in preparing papers and theses. Beyond its support to AU, the agency's staff answers requests for historical information from Congress, the DOD, the Joint Chiefs of Staff, the Air Staff, MAJCOM, and the general public. Other key functions include publishing historical reference works, conducting the AF's oral history program, and maintaining records showing the status of AF organizations and aircraft. As the AF authority on unit lineage and honors, the agency provides research assistance on heraldic emblems, prepares lineage and honors histories for AF units, and verifies the lineage and honors of AF units.

The agency conducts annual oral history and archival training courses for professional staff members of the Air Force History and Museums program. The agency deploys contingency historical information preservation (CHIP) teams during war and other contingencies to capture and archive documentation of AF activities.

# ACRONYMS AND ABBREVIATIONS

ABC Aerospace Basic Course

ACE American Council on Education
ACES Air Force Command Exercise System
ACSC Air Command and Staff College

ACTS Air Corps Tactical School
ADL advanced distributed learning
ADR alternate dispute resolution

AECP Airman Education and Commissioning Program

AEF Aerospace Expeditionary Forces

AETC Air Education and Training Command

AF Air Force

AFB Air Force Base AFCAT Air Force Catalog

AFDC Air Force Doctrine Center
AFDD Air Force Doctrine Document
AFDLO Air Force Distance Learning Office
AFDWG Air Force Doctrine Working Group

AFEHRI Air Force Enlisted Heritage Research Institute

AFHRA Air Force Historical Research Agency

AFHRMS Air Force Human Resource Management School

AFI Air Force Instruction

AFIADL Air Force Institute for Advanced Distributed Learning

AFIT Air Force Institute of Technology
AFJAG Air Force Judge Advocate General

AFJROTC Air Force Junior Reserve Officer Training Corps

AFM Air Force Manual

AFM&S Air Force Modeling & Simulation

AFOATS Air Force Officer Accession and Training Schools

AFPC Air Force Personnel Center
AFPD Air Force Policy Directive
AFRC Air Force Reserve Command

AFRes Air Force Reserves

AFRL Air Force Research Laboratory

AFROTC Air Force Reserve Officer Training Corps

AFSC Air Force specialty code

AFSNCOA Air Force Senior Noncommissioned Officer Academy

AFWI Air Force Wargaming Institute
AIS Academic Instructor School
ALS Airman Leadership School

ANG Air National Guard AOC air operations center

ARI Airpower Research Institute

# Air University Catalog, 2001–2002

ASBC Air and Space Basic Course

ATN PMO Air Technology Network Program Management Office

ATN Air Technology Network
AU/CC Air University Commander
AU/CF Air University Academic Office

AU/CFR Air University Registrar

AU/FM Air University Financial Management and Personnel

AU/SC Air University Information Technology

AUI Air University Instruction AUL Air University Library AUTV Air University Television

AWC Air War College
BDU battle-dress uniform
BOT Basic Officer Training
BOV Board of Visitors

CADRE College of Aerospace Doctrine, Research and Education

CAO Chief Academic Officer

CAP Civil Air Patrol

CAPS counterproliferation and planning system

CBI computer based instruction CBW chemical biological warfare

CCAF Community College of the Air Force

CCM Office of the Command Chief Master Sergeant

CDC career development courses CDX crises decision exercise CEP core electives program

CEPME College for Enlisted Professional Military Education

CESS Civil Engineer and Services School

CFACC combined forces air component commander

CFC Canadian Forces College

CFETP career field education and training plan
CHIP contingency historical information program

CINC commander in chief

CLE continuing legal education

COA courses of action computer security

CONUS continental United States
COT Commissioned Officer Training

CP counterproliferation

CPC Counterproliferation Center

CPD [Ira C. Eaker] College for Professional Development

CPSP commandant's professional studies paper CS&P competitive sourcing and privatization

CSAF Chief of Staff of the Air Force

CSAT Center for Strategy and Technology

CSI Chaplain Service Institute

CV vice commandant

CWPC Contingency Wartime Planning Course
DEA Drug Enforcement Administration

DL distance learning

DOD Department of Defense

DODD Department of Defense Directive

DODIP Department of Defense Informational Program

DR disaster relief

DSN Defense Switching Network
ECI Extension Course Institute
ECL English comprehension-level
EEW experiments, war games
EPC Educational Programs Cadre

EPME enlisted professional military education

EPMEI Enlisted Professional Military Education Instructor ETCA Education and Training Course Announcements

EWI education with industry
EWI education and industry

FLEP Funded Legal Education Program GRE graduate record examination

HPSP/FAP Health Professions Scholarship and Financial HQ AFDC Headquarters Air Force Doctrine Center

HQ USAF/CVA Headquarters US Air Force/Assistant Vice Chief of

Staff

HQ/AETC Headquarters Air Education and Training Command

HQ/AU Headquarters Air University

IA International Affairs

IFB Integrated Forecasting Board

IO international officer

IOS International Officer School ISD instructional systems design

ISR intelligence, surveillance, and reconnaissance

ITV interactive television IW information warfare

IWAC Information Warfare Applications Course

JAOC Joint Air Operations Center

JDACC Joint Doctrine Air Campaign Course JEMM Joint Educational Mobility Model JFACC joint force air component commander

JFC joint force commander

JFOWC Joint Flag Officer Warfighting Course JLASS joint land aerospace and sea simulation JPME joint professional military education

JTF joint task force

# Air University Catalog, 2001–2002

LAN local area network
LLAB leadership laboratories
M&S modeling and simulation

MAJCOM major command

MEDOD management education Department of Defense

NACES National Association of Credential Evaluation Services

NAVWARCOL Naval War College

NCA National Command Authorities

NCASE National Congress of Aviation and Space Education

NCOA Noncommissioned Officer Academy NCOIC noncommissioned officer in charge

NCOPC Noncommissioned Officer Preparatory Course

NGO nongovernmental agencies
NSF National Security Forum
OI operating instruction
OMS officer military schools
OTS Officer Training School

PACE Public Affairs Center of Excellence PCE Professional Continuing Education

PMCC Professional Military Comptroller Course PMCS Professional Military Comptroller School

PME Professional Military Education

RCOT Reserve Commissioned Officer Training

ROTC Reserve Officer Training Corps

SAAS School of Advanced Airpower Studies

SAO security assistance officer

SAR search and rescue

SCI Sensitive Compartmented Information SCI sensitive compartmented information

SES senior executive service SIO senior intelligence officer

SIWAC Senior Information Warfare Applications Course

SNCOA Senior Noncommissioned Officer Academy

SOC Squadron Officer College
OS Squadron Officer School
SSS Senior Services School
TCW theater campaign warfare

TDY temporary duty

TOEFL test of English as a foreign language

USAFA US Air Force Academy

USSOCOM United States Special Operations Command

WMD weapons of mass destruction WSI Warfare Studies Institute